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*The opinion of the Third Circuit is printed in Appendix A of the Petition for a Writ of Certiorari at pp. 1a-27a, the Judgment of that Court is printed in Appendix B of the Petition at p. 28a, the memorandum opinion of the District Court appears in Appendix C at pp. 29a-41a, and the order of the Third Circuit denying the petition of the United States for a rehearing appears in Appendix D at p. 42a.

In the Supreme Court of the United States

OCTOBER TERM, 1972

No. 72-624

UNITED STATES OF AMERICA, PETITIONER

v.

PENNSYLVANIA INDUSTRIAL CHEMICAL CORPORATION

ON PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE THIRD CIRCUIT

RELEVANT DOCKET ENTRIES

DATE *1971*		
April	6	Information filed.
April	6	Request by U.S. Atty. for summons.
April	6	Summons issued.
April	12	Praecipe for appearance for deft. by Harold Gondelman, Esq.
April	16	Summons ret. exec. by certified mail.
May	13	ARRAIGNED—plead NOT GUILTY before Teitelbaum, J. (rep. Lilienthal).
June	22	Jury selected 2:35 to 3:17.
June	23	Jury sworn before Teitelbaum, J. (rep. McCleary (U.S. Atty. Thornburgh (Clerk Otterson.
June	24	Jury trial begun before Teitelbaum, J.
June	24	Stipulation of counsel filed.
June	24	Amendment to information filed by U.S. Atty.
June	25	Jury trial continues before Teitelbaum, J. (deft's oral motion for acquittal—denied).
June	28	Jury trial continues before Teitelbaum, J. (rep. Veronica Mechesney).
June	29	Jury trial continues and concludes before Teitelbaum, J. Memo filed. (rep. Mechesney.) (question of jury attached to memo.)

Date		
1971		
June	29	Jury return verdict of GUILTY—Verdict sheet filed.
June	30	Order *re* Jury accommodations (Teitelbaum, J.) CC: Marshal.
July	26	Transcript filed *re* jury trial held 6–24–71 before Teitelbaum, J. (Rep. Virginia Bengel.)
July	26	Memorandum Opinion filed denying deft's motion for judgment of acquittal made prior to verdict. (Teitelbaum, J.)
July	30	Sentence is that deft. is directed to pay a fine of $2,500.00 on each of Cts. 1, 2, 3 & 4 for a total fine of $10,000.00 (Teitelbaum, J.). Rep. J. Lilienthal.)
July	30	cc issued.
July	30	Notice mailed.
July	30	Order entered directing that the fine be paid into the Registry of the Court and further directing Clerk of Court to pay one-half of said fine, $5,000.00, to said David George Nixon, John J. Zabodni, and Michael Watts, in shares of $1,666.67 each, and that checks be delivered to Richard L. Thornburgh, U.S. Atty., for final distribution. (Teitelbaum, J.)
July	30	Notice of Appeal filed by deft.
July	30	Copy of Notice of appeal mailed U.S. Court of Appeals; together with form to be used in criminal appeals & copy of the docket entries; copy of Notice of Appeal mailed U.S. Atty.; letters to all counsel of record and Judge Teitelbaum.
Aug.	3	Electronic recording of plea before Teitelbaum, J. (#160 Envelope.) (Rep. Lilienthal.)
Aug.	25	Certified record and exhibits mailed Ct. of Appeals.
1972		
May	30	Opinion and judgment of the U.S. Court of Appeals filed.
July	20	Petition for Rehearing filed.
Aug.	21	Order denying Petition for Rehearing.
Sept.	18	Order granting extension of time for filing a Petition for a Writ of Certiorari.
Oct.	20	Petition for Certiorari filed.
Dec.	18	Certiorari granted.

INFORMATION

(Filed April 6, 1971.)

The United States Attorney charges:

On August 7, 1970 at approximately 2:02 p. m., in the Western District of Pennsylvania, defendant, Pennsylvania Industrial Chemical Corporation, a Pennsylvania Corporation, did unlawfully discharge and deposit, from the shore and from its manufacturing establishment situated along the Monongahela in West Elizabeth, Allegheny County, Pennsylvania, and from a concrete pipe approximately 2 feet in diameter at approximate river mile 23.7 of the Monongahela, left bank, certain refuse matter, to wit, iron, aluminum and compounds containing these chemicals, and chlorides, and solids into the Monongahela River, a navigable water of the United States in violation of Title 33, United States Code, Sections 407 and 411.

Second Count

The United States Attorney further charges:

On August 19, 1970 at approximately 3:32 p. m., in the Western District of Pennsylvania, defendant, Pennsylvania Industrial Chemical Corporation, a Pennsylvania Corporation, did unlawfully discharge and deposit, from the shore and from its manufacturing establishment situated along the Monongahela in West Elizabeth, Allengheny County, Pennsylvania, and from a concrete pipe approximately 2 feet in diameter at approximate river mile 23.7 of the Monongahela, left bank, certain refuse matter, to wit, iron, aluminum, and compounds containing these chemicals, and chlorides, phosphates, sulfates and solids into the Monongahela River, a navigable water of the United States in violation of Title 33, United States Code, Sections 407 and 411.

Third Count

The United States Attorney further charges:

On August 7, 1970 at approximately 2:07 p. m., in the Western District of Pennsylvania, defendant, Pennsylvania

Industrial Chemical Corporation, a Pennsylvania Corporation, did unlawfully discharge and deposit, from the shore and from its manufacturing establishment situated along the Monongahela in West Elizabeth, Allegheny County, Pennsylvania, and from an iron pipe approximately 4–6 inches in diameter discharging effluent into a small wooden settling box from which water and refuse matter are discharged at approximate river mile 23.7 of the Monongahela, left bank certain refuse matter, to wit, iron, aluminum and compounds containing these chemicals, and chlorides, sulfates and solids into the Monongahela River, a navigable water of the United States in violation of Title 33, United States Code, Sections 407 and 411.

FOURTH COUNT

The United States Attorney further charges:

On August 19, 1970 at approximately 3:39 p. m., in the Western District of Pennsylvania, defendant, Pennsylvania Industrial Chemical Corporation, a Pennsylvania Corporation, did unlawfully discharge and deposit, from the shore and from its manufacturing establishment situated along the Monongahela in West Elizabeth, Allegheny County, Pennsylvania, and from an iron pipe approximately 4–6 inches in diameter discharging effluent into a small wooden settling box from which water and refuse matter are discharged at approximately river mile 23.7 of the Monongahela, left bank certain refuse matter, to wit, iron, aluminum and compounds containing these chemicals, and chlorides, phosphates, sulfates and solids into the Monongahela River, a navigable water of the United States in violation of Title 33, United States Code, Sections 407 and 411.

/s/ RICHARD L. THORNBURGH,
United States Attorney.

AMENDMENT TO INFORMATION

(Filed June 24, 1971.)

The United States Attorney hereby amends the information filed herein as follows:

1. In Count One by deleting therefrom ", phosphates, sulphates" in lines 10 and 11.

2. In Count Two by deleting therefrom "manganese" in line 10.

3. In Count Three by deleting therefrom "phosphates" in line 13.

RICHARD L. THORNBURGH,
United States Attorney.

TRANSCRIPT OF OFFICIAL NOTES OF TESTIMONY

In the United States District Court for the Western District of Pennsylvania

No. 71-75 Criminal

UNITED STATES OF AMERICA, PLAINTIFF

vs.

PENNSYLVANIA INDUSTRIAL CHEMICAL CORPORATION, A CORPORATION, DEFENDANT

Proceedings of Jury Trial in the above-entitled action before the Honorable Hubert I. Teitelbaum and a Jury on June 24, 1971, at Pittsburgh, Pennsylvania.

APPEARANCES

Richard L. Thornburgh, Esq., and *James Seif, Esq.*, United States Post Office and Courthouse, Pittsburgh, Pennsylvania 15219, appearing on behalf of the Plaintiff.

Harold Gondelman, Esq., Baskin, Boreman, Sachs, Gondelman and Craig, 1018 Frick Building, Pittsburgh, Pennsylvania 15219, appearing on behalf of the Defendant.

PRELIMINARY INSTRUCTIONS TO JURY

The COURT. Good morning, ladies and gentlemen.

Ladies and gentlemen of the jury, what I will say to you now is intended as an introduction to the trial of this case. It is not a substitute for the detailed instructions on the law in the evidence which I anticipate giving to you at the close of the case just before you retire to consider the verdict.

This is a criminal case commenced by the United States, whom I will refer to as the Prosecution or as the Government, and it is against the Pennsylvania Industrial Chemical Corporation.

The Government is merely a party to this case. It stands on exactly the same level as any other party, no more and no less. It is captioned United States versus because there is no other way to denominate the Prosecution. You should pay no special significance to the fact that it is the Government who is bringing the case. Like I say, it is like any other party when it appears in Court.

This case was begun by the filing of an Information by the United States Attorney, Mr. Thornburgh.

Now, you should distinctly understand that the Information simply makes charges against the Defendant and is not in any sense evidence or proof of the allegations which it contains.

The Defendant has plead not guilty to the Information. The Government, therefore, has the burden of proving each of the essential elements of the Information beyond a reasonable doubt.

The purpose of a trial in a criminal case is to determine whether or not the Government has met its burden. The Information in this case is in four counts. In count one, the Government charges in the Information itself that on August 7, 1970, at approximately 2:02 p.m., in the Western District of Pennsylvania, the Defendant, Pennsylvania Industrial Chemical Corporation, a Pennsylvania corporation, did ulawfully discharge and deposit from the shore and from its manufacturing establishment situated along the Monongahela in West Elizabeth, Allegheny County, Pennsylvania, and from a concrete pipe approximately two feet in diameter at approximate river mile 23.7 of the Monongahela, left bank, certain refuse matter, to wit, iron, aluminum and compounds containing these chemicals, and chlorides, phosphates, sulfates and solids into the Monongahela River, a navigable water of the United States in violation of Title 33, United States Code, Sections 407 and 411.

The second count as to charge, on August 19, 1970, at approximately 3:32 p.m., in the same place, the same Defendant did the same thing in connection with certain refuse matter, to wit, iron, aluminum, manganese and compounds containing these chemicals and chlorides, phosphates, sulfates and solids into the same Monongahela River. That is the second count.

The third count refers also to August 7, 1970 at approximately 2:07 p.m., and it charges that the same Defendant did unlawfully discharge and deposit from the shore into the same

Monongahela River in West Elizabeth, Allegheny County, Pennsylvania, from an iron pipe approximately four to six inches in diameter certain effluent into a small wooden settling box from which water and refuse matter are discharged at approximate river mile 28.7 of the Monongahela River, left bank, and that certain refuse matter, to wit, iron, aluminum and compounds containing these chemicals, and chlorides, phosphates, sulfates and solids, was deposited into the Monongahela River which again was the same navigable water in violation of the same sections.

The fourth count refers to August 19, 1970, at 3:39 p.m. It makes much the same allegation as the third count except for the difference in the date and the difference in the alleged refuse matter deposited. In this case it was iron, aluminum and compounds containing these chemicals, and chlorides, phosphates, sulfates and solids into the Monongahela River, a navigable water of the United States.

Those are the four charges. They all concern depositing of certain refuse into the water contrary to law. Those are the allegations.

Now, the sections of the United States Code that are involved are Section 407, Title 33. This section provides in its pertinent part that it shall not be lawful to discharge or deposit from manufacturing establishments any refuse matter of any kind or description whatever other than that flowing from the streets and sewers and passing therefrom into any navigable or in any tributary navigable water from which the same shall float on or be washed into such providing, however, that this section shall not apply to operations in connection with improvement or the construction of public works considered necessary and proper by the United States officers supervising such improvement on public works and provided further that this section shall not be violated if the Secretary of the Army had the above-mentioned in navigable waters unless any grant is violated.

Section 411 of Title 33 provides in pertinent part that every person, every corporation, that violates Section 407 shall be guilty on offense against the United States.

Those are the statutes that we are concerned with. The elements of the offense are as follows. These are the elements that the Government must prove beyond a reasonable doubt: One, that the Defendant discharged and deposited from its manufacturing establishment any refuse matter of any kind or descrip-

tion; two, that it was discharged and deposited into any navigable water or any tributary of any navigable water from which it shall float or wash into any navigable water; and, three, that the refuse matter flowing is not from streets and sewers.

I will go further into these elements, including definition of terms, as it becomes necessary in my final charge, but I wanted you to know that there are three elements that did have to be proved.

As to the second element, the parties hereto have stipulated that the Monongahela River at the sites of discharges and deposits alleged is a navigable water of the United States and also that the shore and manufacturing establishment and concrete and iron pipes alleged to be the sources of the discharge and deposits are owned by the Defendant. So, nobody has to prove those two things. Thus, the second element that I referred to is agreed and stipulated to and no proof will be offered of that. That will mean, however, that the Prosecution will have to convince you beyond a reasonable doubt that this Defendant discharged and deposited from its manufacturing establishment refuse matter of any kind or description. That will have to be proved, and they will have to prove, if there was any such refuse matter, it was not flowing from streets or sewers in liquid state.

I don't know whether you ladies and gentlemen have tried criminal cases prior to this. For that reason, I want to tell you something about the procedure that we are going to follow in this case.

After I finish these preliminary instructions, the case will start with the U.S. attorney telling you what he expects to prove. This is not an argument because you haven't heard any evidence. Nobody is going to argue anything to you. All this is in effect is a road map telling you where he is going, what he expects to prove so, as you hear the testimony from the stand, you will be able to see where it fits into the picture.

I caution you that this opening statement is not evidence. It is not proof of anything. It is merely a statement by the Government, the Prosecutor, as to what he intends to prove. After he does that, he will call his witnesses and introduce evidence in support of the indictments, evidence by which he intends to convince you that the offense was committed.

After the Government has presented its evidence, the defense counsel may, but not need to, make an opening statement. The Prosecution doesn't have to either. The defense can waive an

opening statement. That opening statement is exactly in the same nature as the one by the Prosecution. After making an opening statement, the Defendant can, but need not to, produce evidence. He has a perfect right to rely on the fact that he can contend that the Government failed to meet its burden of proof.

If that is true and you are satisfied as of that, that is the end of the case. It would result in acquittal. He does not have to produce any kind of evidence, but he may do so; and, if he produces evidence, he will call witnesses and introduce his exhibits.

After both have produced their evidence and have rested, the prosecutor then will make his closing argument to you. At that time he will tell you what he contends he has proved and what inferences he thinks you should draw from that proof.

After he concludes, the defense counsel has his opportunity to make a closing comment. Again, neither argument is evidence. The evidence is what you hear on the stand and the exhibits you get. Incidentally, anything I say isn't evidence. The only evidence is what witnesses testify from the stand to.

After the prosecutor has made his closing, the Defendant counsel will make his closing. If there is any appropriate rebuttal, the prosecutor will make it. After that is done, I will give you final instructions on applicable law, and you will retire to consider your verdict which you know must be unanimous and considered separately as to each count.

Under our system, it is your job to determine the facts. Any comment I make you are absolutely at liberty to disregard it. I caution you that, if I do make a mistake in any ruling I make, we have competent counsel here and they have adequate remedies to correct that. If you make a mistake in determining the facts by using any rule of law other than what I have given to you or any evidence other than that which you hear from the stand or any other basis, that would be quite difficult to correct. So you must do your duty conscientiously. Listen to the evidence so you will be able to pass on it at the appropriate time and determine whether it is correct or not.

During the course of this trial, counsel may make objections. In fact, it is probably quite probable that they will. I have never seen a case so far that counsel haven't. And I will have to rule on that. You should draw no inference from the fact that counsel makes an objection or from the ruling of the Court. That is the method by which matters in a dispute as evidence are

brought to the attention of the Court for a ruling. The attorney making the objection is merely doing his duty and, of course, if evidence is excluded, then you must not consider it for any purpose whatsoever.

You will also see from time to time side-bar conferences. This is the bar, not the usual type of bar, and we come to the side of it and there we enter into various discussions. You should not try to guess what we are discussing or wonder why we are there. We are not trying to keep things from you. We are attempting to make sure that the evidence which you get is proper evidence. So, if it appears in doubt—for example, you may hear one of the attorneys, after a witness is called, say I want an offer of proof, and we go over here and the attorney calling the witness tells me what he expects to prove. The other counsel can object or not, and we make a ruling there so you will not be bothered by evidence that is not proper.

Now, you must not consider anything in this case except what you hear here in the courtroom during the trial. You should be careful to avoid reports of the case by any media. Those who live in Pittsburgh will have relatively little trouble to avoid reading about it in the newspapers, but people who live elsewhere might. You should not listen to anything from TV and radio about the case, only what you hear in the courtroom, because the reporter who reports it mainly does a good job but sometimes he reports things which are not exactly as they occur.

You will have to judge the believability of the testimony that you hear. In considering that, you take into consideration the appearance, behavior of the witness, any interest he might have in the outcome of the case, any relation he has to any party in the suit, whether he appears to be speaking to you frankly and with candor or not, and all other methods that ordinarily you will use using your good common sense to judge whether somebody is telling you what is correct or not.

Sometimes somebody gives incorrect testimony because he didn't have the opportunity to observe properly or reason correctly. Those are the matters that you will have to decide.

Now, you should not feel that I have any opinion in the case. If I do, it doesn't matter. It isn't relative. It is your opinion that counts as to the fact in this case. If I wanted to, I could comment on the evidence directly. I could tell you what I thought about evidence. I am not going to do that because I

don't want to impinge on your prerogative in determining the facts. You shouldn't attempt to draw any inference from intonation of voice, facial expression or anything else. I intend to express no opinion, and you shouldn't attempt to read one into anything that might happen.

Sometimes it is necessary, because of the zeal which attorneys have for their cause, that the Court has to stop one or the other attorney from what he is doing. You shouldn't draw any inference from that either. This is not intended to prejudice either attorney or his party. All attorneys in the heat of trying a case sometimes go beyond what the impartial observe believes they should do; and in that instance, it is my job to keep it in an even track. I might have to take steps and say for you not to draw any inferences from that.

This is a criminal case. You are not to concern yourself with what the sentence might be. That is my responsibility and mine alone. You are only to determine guilt or innocence and nothing else, and you should not be concerned with anyone else.

As I already told you, please do not discuss the case with anyone, including yourselves, until the case is all over and you have heard the charge of the Court so you can apply the appropriate law to the facts as you find them.

Mr. Thornburgh.

Mr. THORNBURGH. May we approach the bench for a moment?

The COURT. Surely.

[At side bar.]

Mr. THORNBURGH. I am not quite sure that Your Honor stated our burden correctly as saying we have the negative that this came from a sewer in liquid state in view of the stipulation that the pipes in question are owned by the Defendant. It is clear that they are not.

Mr. GONDELMAN. He still has to prove it. Although the pipe is owned——

Mr. THORNBURGH. Are you contending——

Mr. GONDELMAN. Of course, the fact that one pipe is on our property—number one, it's a sewer. Item number two, I would specifically expect, although I realize Your Honor is making opening remarks, the elements of this offense go beyond what Your Honor has indicated to the Jury, mainly that the Government has a burden of proving the intent and slander and knowledge of the Defendant, and I call Your Honor's attention

to the fact that the only Supreme Court case that discusses it says that it does not require it.

The COURT. Yes, as I read it, it says there is no requirement.

Mr. GONDELMAN. In light of the evidence, it is going to be extremely material.

The COURT. That might become material. If so, we will make a final charge.

Mr. THORNBURGH. Do I understand that Your Honor means that we have to show that this is not a sewer?

The COURT. That it isn't—the statute reads that it isn't something coming from the sewers in a liquid state.

Mr. GONDELMAN. So you go ahead and prove it doesn't.

The COURT. The statute has as an element an exception to it.

Mr. THORNBURGH. I understand that but——

The COURT. I feel that whether or not there was a permit is a matter of defense. That is my present feeling, but I feel that this is a matter which requires affirmative proof.

Mr. THORNBURGH. Negative proof is what it amounts to.

The COURT. Affirmative proof or negative, you have the burden of proving it rather than placing that burden on the Defendant.

Mr. THORNBURGH. O.K.

[In open court.]

The COURT. The stipulation of counsel to this matter to which I have referred and the amendment to the information which are to be filed are being filed of record.

OPENING STATEMENT BY MR. THORNBURGH

Mr. THORNBURGH. Ladies and gentlemen, let me first introduce myself to you again. I am Richard L. Thornburgh, the United States Attorney for Western Pennsylvania. Seated at counsel table with me you will observe James M. Seif who is an Assistant United States Attorney on my staff and who is assisting me in the preparation and trial of the case for the Government.

Judge Teitelbaum has given you a rough outline of the charges that the Government has made and a description of the law under which this case is brought.

I am going to avail myself of the opportunity to sketch for you the facts which the Government will attempt to prove

through the testimony of witnesses, documents, photographs and the like in this case.

I am, as Judge Teitelbaum indicated, trying to give you a preview of the evidence that will be offered as a kind of a road map for you to follow as the case unwinds.

You, in effect, right now are in the position of a person looking at a blank canvas at an art exhibition. You don't really know what the picture is going to be like. During the course of the trial, there will be brush strokes applied on that canvas in the form of evidence by the Government and by the Defendant. And, finally, at the end of the trial, you will have to be in a position of judging just what kind of a picture has been painted and ultimately deciding what that picture is as the finders of fact in this case.

I want to tell you right now, to extend that analogy a little bit, what the Government thinks that picture is going to look like.

As Judge Teitelbaum told you, what I am telling you is not fact and not evidence and something you are free to ignore if I state a fact that we hope to prove and we end up not proving it. I am sure the defense counsel and the Judge will remind you if such is the case.

As Judge Teitelbaum said, the Government charges simply that the Defendant discharged refuse matter from their plant in West Elizabeth in Allegheny County into the Monongahela River in violation of the Rivers and Harbors Act of 1899 that you will hear as the Refuse Act.

The proof of the offense which the Government will offer is not complex. It will consist of testimony of individuals who observed the discharge and gathered samples of that discharge and of the testimony of the chemist to whom they turned these samples over for analysis.

Now, in this case, the persons who investigated the violations are not the ordinary Government witnesses in a criminal case. They are not agents of the FBI or Secret Service, but they are ordinary citizens like yourselves. They are two young instructors, David Nixon and Dr. John Zavodni and a student, Thomas Young, in a local college and Michael Watts, an experienced chemist who works for the Allegheny County Bureau of Tests.

Although these people may potentially, as you hear, gain a share on any fine that may be levied against the Defendant,

they will explain what their real motive may be. The testimony you will hear from them is the following: You will hear how they become interested in taking these samples, what procedure and equipment they used. You will hear the precautions they took to insure the accuracy of their process. You will hear specifically that on the afternoon of August 7, 1970, Mr. Nixon and Dr. Zavodni pulled their canoe in which they were traveling on the river alongside two pipes discharging from the Pennsylvania Industrial manufacturing establishment and took samples of what was being discharged.

We will show you pictures of those pipes and discharge coming out of them. You will hear that Mr. Nixon and Mr. Young returned to these same two pipes on August 19, 1970 and took additional samples in the same way. And you will hear they turned these samples over to the Government's fourth witness, Michael Watts.

He will tell you that he is the director of the Allegheny County Bureau of Tests, and he will sketch for you some of his activities of testing river samples over a period that stretches back to the 1920's. He will describe to you his experiences in making these tests and will describe to you the methods that he uses and they comported with the methods recommended by those experts in the field.

Mr. Watts will tell you, as a director of the Allegheny County Soil and Water Conservation District, he undertook to assist Mr. Nixon and Dr. Zavodni by performing his chemical analysis when they came to him for help. Mr. Watts will describe the tests he carried out, and he will tell you the results of his examination.

He will tell you first the characteristics of the river samples taken at the site of the plant of the Pennsylvania Industrial Chemical Corporation, and he will describe the character of the liquid being discharged from the pipes that these gentlemen pulled their canoe alongside. He will tell you what his tests show in terms of the iron, aluminum, chlorides, phosphates, sulfates and total solid chemicals that were contained in it and which the Government alleges were the refuse giving rise to these charges.

You also have learned by this time that Mr. Nixon and Dr. Zavodni have turned over the results of their samples and the tests run by Mr. Watts to the Government, that is, to my office, United States Attorney's office for the Western District

of Pennsylvania, and that these charges being tried here today were the final results of their undertaking, their labors.

That is it, ladies and gentlemen of the Jury. That is what the Government hopes to prove. I promised you it would be simple and not complex, and I think that we are now ready to proceed to follow the course that I have outlined to you.

I realize that some of the testimony that we will receive will be somewhat technical in nature, and I solicit your patience and particular attention to some of the technical questions. I will try to elicit from the witnesses, as I am a layman myself, a clear understanding of it, and I must give you that one storm warning with respect to some of the testimony that will be received.

Thank you, Your Honor.

The Government calls David Nixon.

OFFER OF PROOF

Mr. GONDELMAN. If the Court please, I would like an offer at side bar on this witness in light of the opening statement.

The COURT. Ladies and gentlemen of the Jury, you will observe counsel has asked for an offer of proof, and you remember I told you what we are going to do up here. I am going to ask him what he expects to prove, and we will pass on it prior to the time that it is brought to your attention.

You will also note that everything that is being said in the courtroom is being taken down by a stenotype reporter here. So, if there are any mistakes made, they can be corrected.

[At side bar.]

Mr. THORNBURGH. Mr. Nixon's testimony is offered to show the existence of a discharge at the sites alleged in the Information on August 7 and August 19, and he will describe the techniques used by himself and Dr. Zavodni and Mr. Young in the collection of samples at those sites. That is about it.

Mr. GONDELMAN. Well, in your opening statement, you said he was going to testify as to his motives which I thought might be included in your offer, and his motives should not interest the Court and the Jury, and I thought you might include that in your offer.

Mr. THORNBURGH. I was anticipating a fact. There is a question in this case as to the bounty provisions, and I was going to give Mr. Nixon the opportunity to discuss that.

The COURT. I think that is important because the Jury should know that, whether he is biased or not.

Mr. GONDELMAN. I would disagree with that because his testimony is going to be as to what he physically did and took. If we are going to get a half-hour exposition on environmental control and polluting——

The COURT. That is not what he has in mind.

Mr. THORNBURGH. If you are not going to go into his motives——

Mr. GONDELMAN. I am not going to go into that.

Mr. THORNBURGH. If you won't on cross, I won't on direct.

Mr. GONDELMAN. If you don't go into his motives on direct, I can't go very far on cross.

Mr. THORNBURGH. You can.

Mr. GONDELMAN. The other thing, if the Court please, I would object to any testimony and identification of exhibits of the taking of samples unless at some point it will be tied into proof by the Government that what these reports indicate are quote refuse of any kind unquote.

The COURT. If they don't prove that, you don't have any worries.

Mr. GONDELMAN. On the other hand, I don't want any testimony coming in. I don't want to simply object to the thing. What I am stating now, unless it is entitled to that definite proof to which I consider their burden to be. Whether I will object to that at the time is something to see.

The COURT. There is nothing to rule on.

Mr. GONDELMAN. No.

[In open court.]

[David George Nixon called as a witness on behalf of the Plaintiff, having been first duly sworn, was examined and testified as follows:]

DIRECT EXAMINATION

By Mr. THORNBURGH:

Q. I would appreciate it, Mr. Nixon, if you would address your responses to my questions to the Jury.

Would you state your full name for the record, please?

A. David George Nixon.

Q. Where do you live, Mr. Nixon?

A. 900 Seneca, Apartment 4, McKeesport.

Q. How long have you lived there?

A. Approximately two years.

Q. What is your age, Mr. Nixon?

A. My age is 30.

Q. Were you born in Western Pennsylvania?

A. No, sir, I was not.

Q. Where were you born?

A. I was born in Herington, Kansas, 1940.

Q. And you have lived in the McKeesport area for the last two years?

A. Yes, sir.

Q. Are you married?

A. Yes, sir.

Q. Do you have children?

A. Two children, a boy and a girl.

Q. Where were you educated, Mr. Nixon?

A. I did my undergraduate work at Colorado College in Colorado Springs.

Q. Did you receive a degree?

A. I did, a Bachelor of Arts degree. My major was political science.

Q. Did you have any post-graduate education?

A. Yes, sir, I did. I went to Johns Hopkins University in Baltimore, Maryland where I spent two years engaged in graduate studies.

Q. Where are you presently employed?

A. Pennsylvania State University, instructor in political science.

Q. Where is that?

A. McKeesport.

Q. Is that the McKeesport extension?

A. It is the McKeesport campus.

Q. How long have you been employed?

A. Two years.

Q. Now, Mr. Nixon, I want to direct your attention to the spring of 1970, about a year ago, and I want you to tell the Court and Jury in your own words how you became involved in the case that is being tried here today.

Mr. GONDELMAN. If the Court please, I object to that question as going back to the spring of 1970. The information charges offenses of August 7, 1970 and August 19, 1970. I think we ought to remain within the confines of the information.

Mr. THORNBURGH. I am merely trying to put it into context,

and I think some preliminary facts might be of help to the Jury and the Court.

The COURT. The objection will be overruled.

By Mr. THORNBURGH:

Q. Did you understand the question?

A. I understood the question. On about April 10 or 15 of last year, I was reading a journal entitled Congressional Quarterly——

Mr. GONDELMAN. If the Court please, we are not going to get into a journal and perhaps what motivated him which isn't evidence but purely heresay. That is the basis of my objection. I don't know what the Journal said or how it motivated him.

Mr. THORNBURGH. Let him testify and——

Mr. GONDELMAN. If I do and evidence comes in which I can't object—he is talking about reading a journal and what it did to motivate him. I object to it.

The COURT. It isn't hearsay certainly because we are not concerned with the truth or falsity of whatever was said in the Journal.

If there is any kind of objection that appears after we have heard what he is going to say, we will consider it then.

The WITNESS. I was reading the Congressional Quarterly at that time, early April of last year, at which time I discovered the existence of the Refuse Act which prohibited a discharge of refuse in the navigable rivers of the United States.

It seemed to me at that time that at last I found a handle by which a citizen could have some meaningful influence on the amount of effluent that was being dumped into the area rivers.

I was encouraged by that and began about three weeks of research in which time I collected Supreme Court and Circuit Court tests of the Refuse Act since it had been passed into law and was encouraged to find that——

Mr. GONDELMAN. If the Court please, we are not going to get a legal conclusion.

Mr. THORNBURGH. Just tell us what you did, not any conclusions.

You are not a lawyer, are you?

The WITNESS. No, sir.

The COURT. Don't summarize the statutes, Mr. Nixon.

The WITNESS. Yes, sir.

By Mr. THORNBURGH:

Q. Let me ask you this: On the basis of the research that you carried out, and not indicating what your conclusions were because we are not interested in that, did you decide on a course of action that you were going to follow?

A. Yes, sir.

Q. What was that course of action?

A. I decided that I would begin a project to document exactly what kind of refuse was being dumped into the Monongahela and Ohio Rivers in the Pittsburgh area.

Q. Did you know at that time whether any refuse was being dumped into the river?

A. In a legal sense, no, sir, I didn't. I simply had observed pipes dumping something into the water.

Q. Did you discuss these plans and this project with anyone at that time?

A. Yes, sir. It was clear to me that the project I had in mind would take efforts of certainly more than one person.

Q. With whom did you discuss it?

A. I went to a fellow faculty member, a biologist at Pennsylvania State University, John Zavodni.

Q. Is he a colleague of yours on the faculty?

A. Yes, sir, he is.

Q. How long did you know Dr. Zavodni?

A. I had known him at that time for approximately seven or eight months.

Q. Did you discuss your plans and your projected course of action with him?

A. Yes. I told him a little bit about the Act that I had discovered and its provisions and asked him if he would be interested in spending the better part of the summer documenting industrial discharges into the Monongahela and Ohio Rivers.

Q. What did he say?

A. He said he thought it would be a good idea and that he would be glad to help.

Q. Now, in the time that you had done this research, you had become familiar with the fact that the provisions of the Refuse Act allow the award of so-called bounty to citizen informants, did you not?

A. Yes, sir.

Q. Did you discuss that with Dr. Zavodni?

A. I did, of course, discuss it with John Zavodni, but I must say I did not tell him about that section of the Act until after

he had agreed to take part in the project and until after he had agreed, as far as that goes, to contribute a hundred dollars with me in a fund that we would finance the project with.

Q. Mr. Nixon, did you and Dr. Zavodni undertake this project as a money-making proposition?

A. No, sir, we did not.

Q. Now, I wonder if you could go into a little more detail as to the specifics of how you planned to carry out this project?

A. Well, most obviously, we would need to acquire some equipment, a canoe or any shallow craft, vessel. In our case, it was a canoe, paddles, life preservers. We needed containers in which to collect samples of effluent. We needed and eventually were able to get a small motor for the canoe and various incidentals and miscellaneous equipment such as thermometers.

Q. But in the spring of 1970, you were making inventory of your needs and they included a boat, paddles, life preservers and, did you say containers?

A. Yes, sir.

Q. Why did you need the boat?

A. Well, it is impossible to get to many of these discharges, industrial discharges, since the mills or companies in question control access to the river banks. So, you need to get to them on the water, and we did not have the boat.

Q. Did you get a boat?

A. Yes, sir, we were able to purchase a secondhand, 15-foot aluminum canoe.

Q. Who paid for that?

A. John Zavodni and I paid for that.

Q. Had either of you done any canoeing up to that time?

A. No, sir. I had never been in a canoe in my life.

Q. You bought the paddles?

A. Yes.

Q. Who paid for those?

A. We both paid for all the equipment.

Q. You bought the life preservers and the containers?

A. Yes.

Q. What kind of containers did you get?

A. Six-ounce plastic bags. We bought that with sterile containers.

Q. On whose advice did you get this?

A. John and I were simply looking for some expeditious way to take these samples, and we wanted sterile containers and

something that could handle it, and it seemed like a good idea at the time.

Q. With the canoe, the paddles, the life preservers and the containers, would you describe what the course of action was that you planned to follow with this equipment and paraphernalia?

Mr. GONDELMAN. That goes beyond the scope of the indictment because we are in the spring of 1970. What course of action he intended——

The COURT. Let's hear it first. I don't know what it is.

By Mr. THORNBURGH:

Q. Go ahead.

A. First we had to learn how to use the canoe, and we took a couple of practice or several practice runs really to learn how to handle it so we wouldn't spill our equipment in the water. We went on, as I say, several such trips down the Youghiogheny River, once down Turtle Creek and one trip by myself on the Monongahela River, and we then finally collected our first samples on May 28 of last year.

Mr. GONDELMAN. That is objected to as not referring to this indictment.

The COURT. We haven't heard what was in them. I think it would be admissible anyway, but we won't go into it anyway.

By Mr. THORNBURGH:

Q. Let me get more specific. What I am asking you, without reference to any particular sample that you took, is what the procedure was that you and Dr. Zavodni appeared to follow as a general rule of taking samples without reference to any particular sample?

A. We decided that one person would collect all of the samples.

Q. Who was that?

A. That was John Zavodni. The other person would keep records and handle the camera.

The reason for this was simply that the sample collection is a regular, dirty business and somebody had to keep clean, and fortunately that was me.

Q. You were Mr. Clean then in the canoe?

A. Yes. We decided then simply to find out what was in the river since at that time we did not know.

Q. Wait. Let me explain again what I want. I want to know what your plan was physically with respect to your location and

the manual chores that you and Dr. Zavodni went through. Do you understand my question?

The COURT. You designated him as Mr. Clean.

By Mr. THORNBURGH:

Q. We got him taking the records.

What I would like is a kind of a job description of each of you on a typical collection operation. I'm sorry I didn't make that clear.

A. John would simply be in the bow of the canoe. I would be in the stern. We would bring the bow of the canoe as close a proximity to the effluent being discharged as possible.

John would then collect the sample either directly into a sample bottle or the plastic container, and at that time I would give him a code number to write on that sample, which he would do.

And I, in the meantime, would be taking down the date, the time, any obvious physical characteristics of what we were seeing, the location of the discharge, what side of the river it was on, at what approximate mile point, and we were able to determine this by reference to the Corps of Engineers Navigation Charts.

Mr. GONDELMAN. Excuse me, Mr. Thornburgh, but, if what we are trying to prove, if I understand Mr. Thornburgh's questions, is whether or not the samples which are alleged to have been taken on these dates at these times came from near or about the Defendant's plant along the Monongahela River, there is not going to be any contest about that.

The COURT. You are indicating you will stipulate to it, but whether Mr. Thornburgh wants to stipulate or wants to prove it is up to him.

Mr. GONDELMAN. I would agree that the samples from the reports of what I have came from the area that came from—

Mr. THORNBURGH. I think it's important for the Jury to have an understanding.

The COURT. This is an offer to stipulate; and, if you want to prove it without a stipulation, go ahead.

Mr. THORNBURGH. This is offered to show the practice, and we will get to the specifics as quickly as we can. We will be very brief.

The COURT. The Jury and I have lots of time. Just go right ahead.

By Mr. THORNBURGH:

Q. Let me rephrase my question, Mr. Nixon.

Let's take a typical situation where we are collecting a sample. You give me the steps you would go through, you and Dr. Zavodni.

Mr. GONDELMAN. I would object to the typical situation. Why don't we get to August 7 and 19, because I object to what a typical procedure was if it then isn't followed up with what was done. If we get to what was done, we don't need the typical.

The COURT. We will have to let the Government counsel try the case in his manner, Mr. Gondelman.

Mr. GONDELMAN. Except as what is irrelevant to what is generally done, which is irrelevant, and I object to that. What was done on August 7 and 19 is the question. I object to the general typical and what did you usually do, how did you usually do it, until we get to the point of what was actually done.

The COURT. If it isn't tied in, you can move to strike.

Go ahead, proceed.

The WITNESS. We would pull the canoe up to the bank as close a proximity to the discharge as possible. John would get a sample bottle; and, if he could reach a discharge from the canoe——

By Mr. THORNBURGH:

Q. A sample bottle?

A. Well, later on in the study we began to use glass bottles rather than the plastic bags which I referred to earlier.

He would take either a plastic bag or a quart sample bottle and, if he could reach the effluent discharge from the canoe, he would at that time insert a funnel into the top of the bottle and hold that under the discharge and then rinse the funnel out in the discharge water and the bottle out in the discharge water, and then he would fill the bottle with the effluent that was coming out of whatever source it might have been.

He would then place a cap on the top of the bottle. At that time I would give him a code number to write on the sample bottle for future identification.

Q. Would he write that on there?

A. Yes, he would write it on the bottle with the Magic Marker pencil.

Q. On the glass?

A. Sometimes on the glass, but we had bottles prelabeled in many cases, and he would write it on the label of the bottle. I would then record the date, time and location and so forth.

Q. How would you record that?

A. We had a piece of paper which indicated what kind of relevant information we would have to collect, and I would take that information down. In addition, I would take photographs, a close-up picture of the nature of the discharge, and then, after sampling, back away from the discharge usually and take a distant shot to facilitate future identification at the location of the discharge.

Q. How did you decide which discharges you were going to sample?

Mr. GONDELMAN. Objected to as immaterial.

The COURT. Overruled.

The WITNESS. We really made no prior judgments. We simply looked for pipes dumping stuff into the water. When we came across such a pipe, we would sample it.

By Mr. THORNBURGH.

Q. How did you plan to identify the data which you collected?

A. Again, by code number. We would assign a number to any pipe that we would find dumping effluent.

Q. Did you have a system for identifying those numbers?

A. We did. We had a number series. For example, the 200 series represented—and any code number that was 209 and something would be taken above lock and dam number three on the Monongahela River.

The 110 series would be between that lock and dam all the way down to the Youghiogheny or past the Youghiogheny River to the lock and dam number two on the Monongahela near the Edgar Thompson Works of U. S. Steel.

And the 300 series began at that point and went down the Monongahela to the confluents of the Monongahela to the Allegheny or the beginning of the Ohio River.

And the 400 series began at that point and went on down the Ohio River to roughly Aliquippa.

So, if a number or a sample has a code number of, say, 400 and something, that means it comes from a certain location on the river.

The COURT. Ladies and gentlemen of the Jury, from this testimony an inference could be drawn that tests were made from pipes having no connection with this Defendant. You must not speculate as to what the results were of any tests except as to those set forth in the information here concerned.

By Mr. THORNBURGH:

Q. How would you identify a particular sample that you took, using this code that you have set up?

Mr. GONDELMAN. If the Court please, I again state we are still talking about how would you. We have four samples specifically relating to this case. It seems to me we ought to get to those so we don't get to the objection Your Honor himself raised.

The COURT. I didn't raise any objection. I am merely saying what the Jury is hearing is the background, history, of the general operation, and we will be concerned with how that applied to the four situations set forth in the Information.

Ladies and gentlemen of the Jury, this is for background purposes so you will understand what happened. We can't try cases in a vacuum. Anything other than the four things in the Information, you shouldn't concern yourself as to what happened except as to the four.

I am just merely trying to instruct the Jury as to how to treat the evidence.

By Mr. THORNBURGH:

Q. Do you recall the question, Mr. Nixon?

A. Yes, sir. As I stated, each pipe was assigned a number. Let us say 100. The first sample we would collect from that pipe would be labeled 100–1. The second sample, 100–2 and so on.

Q. So that, by looking at a sample and collating it with your data that you were taking in the back of the canoe, could you identify where that particular sample had come from?

A. Yes, I could pin down the exact geographic location.

Q. Could you identify the date and time upon which it was taken?

A. Yes, sir.

Q. How many samples would you take at each outfall?

Mr. GONDELMAN. Objected to as immaterial.

The COURT. Overruled.

The WITNESS. As a rule of thumb, we attempted to take multiple samples of every discharge. The average over the entire summer was three to four samples of every discharge that we observed.

By Mr. THORNBURGH:

Q. You stated that you would—well, you tell me and tell the ladies and gentlemen of the Jury precisely what data you

would take at the end of the boat as was observed by you or passed on to you by Mr. Zavodni.

A. Yes, we would take down, again and most basically, the code number. We would then write the location, the physical location, of this discharge pipe on the river. We would specify what part of the river, right or left bank, as determined when you are facing downstream, right or left bank. I would write down a description of the discharge facilities, was it a pipe or a tunnel of approximately what measurements, what was the material of which it was made, iron pipe or concrete pipe and so on.

I would, in addition, write down the date of the sample and initial—and get the initials of anyone who witnessed it. Usually that was John and I. And, again, I would inscribe the date and then the time, the sample number, indicating the method by which we took the sample.

In some cases, as I have indicated, the discharge was very easy to reach. In that case, we would sample it at its source before it touched anything else. In other cases, it was impossible to do that and we had to sample the effluent after it had run down the bank but before it entered the river. In such a case, I would enter it "before entry" and the date. There would be a space to indicate who took the sample. There would be the place where John Zavodni would sign his name, and finally there would be an indication whether or not any photography had been done at that site.

Q. When you had collected these samples, did Mr. Zavodni analyze them then?

A. No, he did not although it was originally planned to do that. It just became clear to us in the first place that we were generating many more samples than John had either the time or the equipment to analyze. There was just too much of a project.

Q. Who did analyze them?

A. Mike Watts, the Director of the Allegheny County Bureau of Tests.

Q. How did this come about?

A. After it became apparent to us that we couldn't possibly analyze the samples ourself. In the first place, I don't have the expertise. I don't have the training to help John, so he would have had to do it on his own.

When it became apparent we couldn't do our own analysis, I began looking for help.

I called a man named Wayne Kelly who is the executive assistant of Commissioner Thomas Foerster.

Mr. GONDELMAN. If the Court please, I would object to what Commissioner Foerster's man told him. He hired Mike Watts. That is what we are eventually going to get to, but the telephone call, you call it background material; I call it a waste of time.

The COURT. That will be for the Jury to determine.

You may proceed.

Mr. GONDELMAN. I object to something anybody told him.

The COURT. I haven't heard anything like that so far.

Mr. GONDELMAN. When a telephone call was made, I don't know whether he is testifying as to hearsay or not, and I don't know whether or not he knows what hearsay is.

The COURT. There is a time-honored procedure in every Court that, if the testimony is hearsay, you move to have it stricken and then we ask the Jury to disregard it.

Mr. GONDELMAN. Also, Your Honor, I try in all cases to anticipate hearsay so it doesn't come out in Court so Your Honor does not have to instruct the Jury to disregard something they heard.

The COURT. We will see where we are going.

By Mr. THORNBURGH:

Q. Leave out the telephone conversations, Mr. Nixon. Just tell with whose cooperation you were able to get Mr. Watts' assistance.

Mr. GONDELMAN. Objected to as immaterial.

The COURT. Whom did you talk to concerning somebody to test this material?

The WITNESS. I talked to a man named Wayne Kelly.

The COURT. As a result of that, what did you do?

The WITNESS. I asked him if the county would analyze our samples since we had really no way of doing it and we couldn't afford to hire it done.

The COURT. Who did you ask that?

The WITNESS. I asked Mr. Kelly that question and asked him to request Commissioner Foerster to grant us permission to have Mike Watts analyze those samples.

That permission was later forthcoming, and Mike Watts then began about mid-July to do all of our chemical analyses.

By Mr. THORNBURGH:

Q. You then delivered in mid-July the first set of plastic bags that you had taken samples of?

Mr. GONDELMAN. Objected to as incompetent, irrelevant and immaterial as to the information which is August 7 and August 19. What he delivered in July has no bearing on this case.

Mr. THORNBURGH. May we approach the bench for just a moment?

[At side bar.]

Mr. THORNBURGH. It is evident that these fellows didn't just show up out of a clear blue sky on August 7, and I object to Mr. Gondelman's continuing objection to an objection that is overruled and interrupting a line of——

The COURT. I think, too, you can't do this. You have to have background; and, if you didn't do it this way, you would be fuming when he would attempt to introduce——

Mr. GONDELMAN. No, because it is highly prejudicial, totally immaterial, highly irrelevant because the fact is that all this guy has to testify to is that he took a sample on August 7, sent it to the county lab. Everything that is being testified to, you can instruct the Jury from now to doomsday that they are not to consider it and——

Mr. THORNBURGH. There is a matter of how careful he was, whose advice he sought. I can't just——

The COURT. I am not going to tell Mr. Thornburgh how to try his case. The next time you prosecute a case, you can do it your way.

Mr. GONDELMAN. My objections will be on the record so we understand?

The COURT. You have a continuing objection to the background information; and, if I am wrong, there are people that can correct it.

Mr. GONDELMAN. O.K., fine, thank you, very good.

[In open court.]

By Mr. THORNBURGH:

Q. In mid-July then, did you deliver the first of these plastic—was it plastic bags? You spoke first about plastic bags; then you spoke of quart bottles. Will you explain what the differential was?

A. The plastic bags were of a six-ounce capacity. After initial contact with Mr. Watts, we learned that six ounces or even

twelve ounces, that is one or even two bags, of effluent would not be sufficient to run a complete chemical analysis.

The COURT. That's getting into hearsay now. I think what we better do is merely say what you did.

The WITNESS. We changed from—we discontinued the use of six-ounce plastic bottles and began using twelve-ounce or one-quart glass bottles.

By Mr. THORNBURGH:

Q. Where did you get those bottles?

A. Those bottles were provided to us by Mr. Watts.

Q. When you talked to Mr. Watts and obtained his assistance, did you tell him what you were doing?

A. Yes, sir.

Q. What did you tell him?

A. We told him simply that we were making an inventory of all the industrial discharges that we could find on the Allegheny and Ohio Rivers.

Q. When you would deliver a set of samples to Mr. Watts in the bottles, how would they be described?

A. I am sorry, we would not deliver the samples as such. Mr. Watts would dispatch an Allegheny County car to come out to the campus at Penn State and pick those bottles up where they had been stored under lock and key. We would then load them into his automobile, and he would take them to Mr. Watts.

Q. How did you identify them to Mr. Watts?

A. By the code number.

Q. Did you tell him where any particular one came from?

A. We did not.

Q. Did you get from Mr. Watts the results of his tests that he performed?

A. Yes, sir.

Q. How were they furnished to you?

A. They came essentially in four bundles, one bundle of data, several pages of data, rather early in the game. Then there was a period of time that passed while he was occupied with doing the analysis. When he had his data in a relatively finished form, he began sending us then three other packets of data.

Q. You eventually got the results of all the tests made on the bottles that you furnished?

A. Yes, sir.

Q. Now, Mr. Nixon, I would like to direct your attention specifically to August 7, 1970. Can you now tell the Court and the Jury precisely with respect to the matters alleged in the information relating to August 7, 1970, what you did on that date?

The COURT. This seems to be an ideal breaking point for a morning recess. We will recess the Court for ten minutes.

(A recess was taken at 11:10 am., after which at 11:40 a.m., the following proceedings were held in Open Court:)

The COURT: Can we have the witness back on the stand?

Mr. THORNBURGH. Mr. Nixon.

The COURT. Proceed, sir.

By Mr. THORNBURGH:

Q. We had arrived at the recess, Mr. Nixon, at August 7, 1970, and I directed your attention to that date and asked that you describe to the Jury and the Court the activities which you undertook that day as they bear on the issue before the Court at this time.

A. May I refer to my notes, please?

Q. Yes.

A. On the 7th of August at approximately 2:02 p.m., John Zavodni and I paddled up to the Pennsylvania Industrial Chemical Company or the discharge at that time that we labeled as No. 230.

John Zavodni used a sampling device. It is a bamboo pole with a sampling device at the end of it, container at the end of it, and he sampled effluent that was coming out of a two-foot concrete pipe that was dumping effluent into a small wooden settling box. The effluent was then running out of the settling box down over the rocks on the bank into the river.

Q. What number discharge is this?

A. No. 230.

Q. Go ahead.

A. John used the sampling device which I have described on the end of the bamboo pole and inserted that into the effluent collecting the sample after he had rinsed out as per our usual practice. He then stoppered the bottle after he had poured the effluent into the sampling bottle. I gave him the code number, in this case, Code No. 230–1.

Q. The No. 230 indicated what?

A. The No. 230 indicates that two-foot concrete pipe at approximately 23.7 miles on the Monongahela, on the left bank

of the Monongahela River, just downstream of the lock and dam No. 3.

Q. What did the dash one means?

A. The dash one means it was the first time that we sampled that particular discharge of effluent.

Q. Now, you mentioned that this was Pennsylvania Industrial Chemical Corporation. Did you know at that time that this was Pennsylvania Industrial Chemical Corporation?

A. We had inquired at the lock and dam as to the identity of the mill. The lock is directly across the river and just slightly upstream from the mill in question. We were led to believe that that was the name of the company.

The COURT. Ladies and Gentlemen of the Jury, I caution you that that is how he got the information, but that does not establish that that is who owns the pipe. I believe, however, that that has been stipulated.

Mr. GONDELMAN. It is stipulated to. It is on our property.

The COURT. It is the pipe coming from the Defendant Corporation.

By Mr. THORNBURGH

Q. This was not the only site at which you were sampling on at that time?

A. No, sir. After sampling No. 230——

Q. Let me interrupt you there, Mr. Nixon.

Mr. GONDELMAN. May I see those, please, so I can identify mine.

(Whereupon, Government Exhibits Nos. 1, 2, 3 and 4 were marked for identification.)

My Mr. THORNBURGH:

Mr. Nixon, I show you what has been marked for identification purposes Government Exhibit Nos. 1, 2, 3 and 4 and ask if you can identify those? Take them in order, first Government Exhibit No. 1.

A. Number one is or contains a picture of discharge which we had labeled 230.

On the back of the photograph it has in my handwriting the number of the discharge.

Q. What is on the back?

A. 230.

Q. Who took that picture?

A. I took the picture and developed the film from which this print was made.

Q. Would you indicate on that picture, Government Exhibit No. 1, the location of what you have described as Outfall 230? Circle it.

A. Certainly.

Q. And that is what you have described as the concrete pipe discharging into a wooden settling box?

A. Yes, sir.

Q. When was that picture taken?

A. That picture was taken on August 7.

The COURT. The year?

The WITNESS. August 7 of 1970, excuse me.

By Mr. THORNBURGH:

Q. Would you similarly identify Government Exhibit No. 2?

A. Government Exhibit No. 2 shows the same discharge, this time from a closer vantage point. Again, it has in my handwriting on the back 230, our identifying code number.

Q. By whom was that picture taken?

A. By myself.

Q. You took all these pictures on the day in question, didn't you?

A. Yes, sir.

Q. Would you similarly identify No. 3 then?

A. This is yet another picture of the same discharge taken by me. Again it has in my handwriting on the back No. 230. Again it is a close-up of the same discharge.

Q. And No. 4?

A. No. 4 is a color photograph of the same discharge showing the wooden settling box, the pipe, the effluent pouring down over the rocks into the river.

Q. And on the reverse side it has No. 230?

A. No. 230.

Mr. THORNBURGH. I would like to move into evidence the Government exhibits and ask the Court leave to give them to the Jury to examine.

Mr. GONDELMAN. If the Court please, I object to the exhibits for the reason that unless the Government will tie it into not being one of the exceptions, and I think it ought to be done prior to their admission, that it will have no relevancy in this case.

The COURT. Objection is overruled. The jury will have the opportunity to see the pictures at the recess.

Mr. THORNBURGH. All right.

(Whereupon, Government Exhibit Nos. 1, 2, 3, and 4 were received in evidence.)

By Mr. THORNBURGH:

Q. Now, on August 7, 1970, after Mr. Zavodni had completed the sampling of what you identified as No. 230, what steps did you follow next?

A. After having sampled No. 230, after having photographed it, then we paddled downstream some 100 feet to a second discharge which we have identified as No. 231.

That discharge again is about at 23.7 miles on the Monongahela, again on the left bank. It is a four to six inch iron pipe again discharging effluent into a small wooden settling box. The effluent was pouring out of the settling box onto the rocky bank and then into the river.

We paddled up to that site and John, again using the bamboo pole with the sampling device on the end, collected the sample and again by the standard procedure transferred it into a sample bottle by using a funnel. He then capped the bottle. I gave him the code No. 230-1 which he wrote on the bottle.

After I inscribed the date and time in our notes, I took photographs of that discharge.

Mr. THORNBURGH. Would you mark these, please?

(Whereupon, Government Exhibit Nos. 5 and 6 were marked for identification.)

By Mr. THORNBURGH:

Q. Now, again, Mr. Nixon, I show you what has been marked for identification purposes as Government Exhibit No. 5 and ask that you identify that.

A. This picture shows the pipe which we have identified as No. 231, and on the back in my handwriting are the numbers 231.

Q. Again, would you take the pen and circle the pipe that you have described as 231 and similarly identify Government Exhibit No. 6?

A. This exhibit is a close-up photograph of the discharge in question. On the back in my handwriting is No. 231. I believe I recognize here John Zavodni's handwriting—

Q. Whether or not it is his handwriting, what does it say?

A. It says, "Can't see pipe in picture."

This picture was taken below considerably and so all that was seen was the wooden collecting box that is in the photograph. The pipe is further in the background.

Q. Now, both these pictures were taken by you on August 7, 1970; is that correct?

A. Yes.

Q. And they are pictures of what you have identified through your code as outfall No. 231?

A. That's correct.

If I may add one thing, the colored photograph that you showed me a few moments ago was taken on the 19th. I had only one camera. One day I shot black and white and the next day I shot colored. And the next day I was there, I shot colored.

Q. It was taken on the 19th but it is a representation of No. 230?

A. Yes, that's correct.

Mr. THORNBURGH. Does counsel have any objection as to the introduction in evidence?

Mr. GONDELMAN. I have the same objection and I presume the same ruling?

The COURT. Do you have any different objection on the basis of the dates?

Mr. GONDELMAN. No, the dates don't bother me.

Mr. THORNBURGH. I offer Government Exhibits 5 and 6 into evidence and again ask the Court's leave that they be given to the Jury during intermission.

Mr. GONDELMAN. I have no objection to those subject to the statement I made to Your Honor previously.

The COURT. Yes, I understand. They are admitted.

(Whereupon, Government Exhibit Nos. 5 and 6 were received in evidence.)

By Mr. THORNBURGH:

Q. Now, after you had completed the sampling of what you identified as pipe 230 and pipe 231, where is the next sample you took?

A. That day?

Q. Yes.

A. As I recall——

Q. As you left the shore.

A. It seems to me—I can check that very quickly if you will——

The COURT. Well, does the next sampling have anything to do with the matter being tried here?

Mr. THORNBURGH. Yes, it does.

By Mr. THORNBURGH:

Q. Not the next outfall sample, the next water sample.

A. Oh, yes, excuse me. As soon as we left that point, we paddled out into the stream. At about midstream we took a sample of the river water at about one foot depth. John Zavodni took that sample. He stopped the bottle. I told him to label that No. 511–1.

Q. No. 511?

A. Yes. The 500 series of numbers designate midstream samples. So, anything with a 500 number comes out of the river directly.

Furthermore, of the 500 numbers, if it is a 501 or 502 and so on, it is taken above Lock and Dam No. 3. No. 511 was the first sample taken below Lock and Dam No. 3.

Q. And this one you took on August 7 was labeled 511–1?

A. That's correct.

Q. Was that sample taken upstream or downstream of the two outfalls?

A. Ordinarily we like to take samples upstream, but in this case we are very, very close to the lock and dam, so it is taken directly in front of and about in the middle of the river of those discharges. We could not get upstream for the dam.

Q. Now, with respect to the discharges here in question, that completed your activities on August 7, 1970; is that correct?

A. Yes, that is correct.

Q. Were those samples then furnished to Mr. Watts?

A. Yes, they were. By our standard procedure, Mr. Watts sent a man out who picked up those samples from the Science Building at Penn State University.

Q. Was there anything you did on August 7, 1970 with respect to the collection of these samples that varied from your usual procedure which you have already described?

A. No, sir.

Q. Now, I want to direct your attention to the 19th of August 1970, and ask you if you will for the benefit of the Court and Jury describe your activities on that date in the same manner?

A. On that date at approximately 3:32 p.m. of the 19th of August, in our canoe, we came to the same point, at No. 230.

Q. This is you and Dr. Zavodni?

A. Yes. I'm sorry, this was myself and a student of mine,

Mr. Thomas Young. Dr. Zavodni was out of town on his vacation, and Mr. Young agreed to take the samples for that day.

Q. Did you instruct Mr. Young as to how he was to proceed?

A. Yes, sir, I did.

Q. Were these the only samples that you took on that day?

A. No, sir. We took, I believe, approximately 25 samples that day. Most of those had been taken upstream at three principal locations on the Monongahela River. He did all of that sampling.

Q. Did Mr. Young follow under your instructions the same procedures that you and Dr. Zavodni had agreed to previously?

A. Yes, to the letter.

Q. Was there any departure?

A. None whatsoever.

Q. Proceed, please.

A. Mr. Young and I, in the same procedure that Dr. Zavodni and I had used, came up to the point of entry of the effluent from No. 230. This was, again, at 3:32, or approximately, on the 19th of August.

Q. P.M., in the afternoon?

A. Yes, sir.

Mr. Young then using the sample collector previously described collected the sample and put it into the sample bottle. The bottle was then stoppered as per usual procedure. I gave him the number 230–2.

Q. Once again, if you will just explain what that code means?

A. The number 230 is the pipe and the dash 2 is the second time we sampled that pipe.

He then wrote that number on the bottle and that completed our work with that particular sample except that I took that one colored photograph that I mentioned earlier.

Q. That would be Government Exhibit 4, the colored photograph that was taken on the 19th rather than the 7th?

A. Yes.

Q. What is the next sample that you took?

A. We went from that point downstream, again about a hundred feet, to the discharge we numbered 231.

When we approached that discharge, there was a man present at the discharge. He asked us what we were about, and we said that we were taking samples of effluent.

I asked him if he was from Pennsylvania Industrial Chemical Company, and he said no, he was a consulting engineer hired by that firm.

Q. Did Mr. Young take the sample there?

A. Mr. Young, as it turns out, did not take a sample at that location. We were about to, and it occurred to me that the engineer had a much better vantage point to take a sample.

I asked him if he would do so, and he said that he would and he took the sample for us. He held the bottle with a stopper in it directly under the wooden collecting box and collected that sample.

Q. Did he rinse the bottle?

A. No, sir, he did not.

Q. He took the sample without rinsing the bottle?

A. Yes, sir.

Q. Then he put the stopper in?

A. Yes, sir.

Q. Did he hand it back to you or Mr. Young?

A. He handed it to Mr. Young.

Q. That was marked what?

A. That was marked 231-2.

Q. Other than the presence of the individual who gave you assistance on August 19, 1970, and the fact that he didn't rinse the bottle in the effluent, was there anything other than your normal procedure that was followed?

A. No, sir, it was exactly the same procedure.

Q. What was the next water sample that you took on August 19, 1970?

A. Similar to the previous occasion that we have been at this particular location, we then paddled out into midstream directly in front of these discharges and took a midstream sample of the river at approximately a depth of one foot. Mr. Young took that sample. After he had collected the sample, I instructed him to label it 511-2.

Q. What did that mean, once again?

A. That it was a midstream river sample, that it was the first sample downstream of the Lock and Dam No. 3 in Elizabeth, and that would mean, of course, that it was the sample taken in front of 231 and 230.

Q. And the dash 2 meant what?

A. That is was the second such midstream sample we had taken at that location.

Q. Now, were these samples then turned over to Mr. Watts?

A. They were, by the same procedure. Mr. Watts dispatched a man to the Penn State campus who picked those samples up from the Science Building.

Q. Let me just summarize if I can, Mr. Nixon. I believe you have testified that you turned over to Mr. Watts, as a result of your sampling in connection with the matter we are concerned herewith, a total of six samples, 230–1, 231–1 and 511–1 taken on August 7, 1970?

A. That's correct.

Q. And 230–2 and 231–2 and 511–2 which were taken on August 19, 1970?

A. That's correct.

Q. Did you receive Mr. Watts' analysis of those six samples?

A. Yes, sir, I did.

Q. When you received that analysis and you had finished all of your sampling, what did you do with the samples and the analyses?

A. The samples remained in the custody of Mr. Watts.

Q. What did you do with the analysis?

A. The analysis I compiled for all of the discharges from these two sites together with the information as to location, who witnessed the samplings, who did the sampling and so on.

That information was accompanied with an affidavit and supplied to you on October 22 of last year.

Q. Now, at any time prior to the time that you turned this material over to the Government, did you tell Mr. Watts that samples 230–1, 230–2, 511–1 and 511–2 and 231–1 and 231–2 related to Pennsylvania Industrial Engineering Corporation?

A. No, sir. The only information Mike Watts had were the numbers written on the bottle.

Q. You gave him no way to decode the arrangement that you had set up?

A. I did not, not until long after you had the information.

Q. And you didn't tell him from where any particular sample had come from?

A. No, sir.

Q. You are not a chemist, are you?

A. I am not.

Q. And you made no assessment of the results of what Mr. Watts gave to you prior to turning it over to the United States Attorney?

A. I couldn't have.

Q. When did you finally complete your project on the rivers in 1970?

Mr. GONDELMAN. Objected to as immaterial.

The COURT. I don't see——

By Mr. THORNBURGH:

Q. It doesn't continue to the present time, does it?

A. It does not.

Q. It was completed prior to the time you turned it over to the United States Attorney's office on October 22?

A. Yes, sir.

Q. What would you estimate that the total expenses were that you incurred in carrying out this project?

Mr. GONDELMAN. Objected to as immaterial.

The COURT. Sustained.

Mr. THORNBURGH. May I just have a moment, Your Honor?

The COURT. Surely.

By Mr. THORNBURGH:

Q. I just have one question further, Mr. Nixon, with respect to the bottles that were furnished to you by Mr. Watts after you abandoned—your testimony indicates the use of those plastic bags. I want you to describe in what conditions those bottles came to you and what steps, if any, you took to supervise their presence in your possession.

A. The bottles came to us in large, sealed, corrugated boxes. The boxes contained 36 quart bottles each. Sealed inside the boxes would be a bag with stoppers for the bottles. We would open the boxes when they were delivered, examine the bottles and at that time place stoppers on the bottles.

In addition, at that time we would label the bottles with a blank label so that on the site, when we made use of each bottle, it could be labeled with the appropriate code number.

Q. When were they unstopped?

A. The next time they were unstopped was when the effluent went into the bottle for the first rinse out. After the sample was taken, they were then restoppered.

Q. So there will be no misunderstanding, it was these bottles and not the six-ounce plastic bags that were being used at sites 230, 231 and 511?

A. All six samples were collected in one-quart bottles.

Q. And the procedure that you described to insure the use was what you used in this case?

A. That's correct.

Mr. THORNBURGH. At this time, Your Honor, the Government has no further questions of the witness.

CROSS-EXAMINATION

By Mr. GONDELMAN:

Q. As I understand it, Mr. Nixon, you did discover and read the Refuse Act or the Act of March 3, 1899, did you not?

A. Yes, sir.

Q. And did you find under that Act that, under the penalty provisions, the Court could award you one-half of the fine assessed against anyone who you reported to the Government of the United States as violating that Act?

A. That's correct.

Q. So that, you did understand that, if you then took your affidavit and these samples as described in your direct testimony to Mr. Thornburgh and he instituted this prosecution and the Defendant was found guilty and if he was fined, the Court could give you one-half the amount of that fine?

A. It could do so. That was my understanding.

Q. And, in fact, while you were doing this, you did contact the television stations and the reporters and they came out and took pictures of you paddling up and down the river in your canoe?

A. They did.

Q. That happened because you contacted them?

A. I called Mr. Lutz.

Q. You said, I am going up the river in my canoe to take samples; how about coming down, and he came down and took pictures and you were on television?

A. That is partly correct. Any television work that was done was done after the project was over, after all of our data was in, and on no occasion, single occasion, did anyone, whether it may be television or newspaper, ever use for publicity purposes any samples that we took for purposes of prosecution.

Q. But the fact that they knew you were taking samples and were engaged in the process is because you called the television station and they came in your instigation?

A. I called Mr. Luts.

Q. In fact, at one interview with Mr. Luts you stated, if these cases were successfully prosecuted, with the finder's fee you could buy a more luxurious boat or yacht instead of using the canoe; did you not say that?

A. What I said was that if we were able to get half the fine money that we would then be able to do such projects more efficiently with a better boat that would allow us to cover more river more expeditiously and which would allow us to take better pictures.

Q. You did use the word more luxurious boat and the word yacht?

A. I did not use the word yacht; I am certain of that. I have always had in mind to purchase, if I could ever afford it, a small houseboat which would allow me to do what I intend to do.

Q. In connection with your research, did you, in reading the Act, find that it provides for the Corps of Engineers to issue a permit?

Mr. THORNBURGH. Objection, Your Honor. It calls for a conclusion on a question of law.

The COURT. Would you read the question back to me?

(The reporter read the question.)

The COURT. You may answer that yes or no, and that is the conclusion of the matter.

The WITNESS. Yes.

By Mr. GONDELMAN:

Q. Did you then go to the Corps of Engineers in the City of Pittsburgh to see whether or not they had any procedure whatsoever for anyone to secure such a permit?

The COURT. That is what I said. He could answer yes or no. He has answered it, and that is the conclusion of the matter. He read the statute.

Mr. GONDELMAN. As to the statute——

The COURT. Nothing further along that line.

Mr. GONDELMAN. Can't I ask him what he did concerning his research?

The COURT. Yes, but I don't want any interpretation of the procedures from this witness.

Mr. GONDELMAN. I am not asking for interpretation. All I want to know is if he went to the Corps of Engineers.

The WITNESS. I went to the Corps of Engineers.

By Mr. GONDELMAN:

Q. Were you able to secure application for a permit?

Mr. THORNBURGH. There is no showing that this witness had any need.

The COURT. He isn't discharging any liquid. Why would he want a permit?

Mr. GONDELMAN. He had done his research. We have covered an awful lot of ground from this witness on direct which——

The COURT. Don't make any further comment along that line.

With your permission, I will run the Court, all right?

Now, ask him if he was discharging anything in the water; and, if he was, you can ask him about the permit.

Mr. GONDELMAN. I am respectfully declining to ask the question because it is obvious.

The COURT. Then I don't know why he would want it.

By Mr. GONDELMAN:

Q. You did go to the Corps of Engineers?

A. Yes.

Q. Did you go to the State Water Control Pollution?

A. No, sir.

Q. Did you ever walk off the boat and go around the property of Pennsylvania Industrial to see where the water that you had sampled had come from?

A. It is impossible to do that without trespassing.

Q. Did you know that the two-foot thing——

Mr. THORNBURGH. Objection. If Mr. Gondelman is going to state facts, I think he ought to be sworn.

The COURT. He can ask a question.

Mr. THORNBURGH. He started to ask about a two-foot thing, and there is nothing on the record at this time about that.

The COURT. Let me hear the question before we have an objection.

Mr. GONDELMAN. Let me go back because I thought there were two-foot things testified about, but let's see if we understand each other.

The COURT. Gentlemen, I have a Jury on which I must take a verdict.

I am going to recess this now until 2:00. Until that time, you will be able to look at those pictures and the Jury will see them.

Recess the Jury for retirement.

(Whereupon, at 12:20 p.m., Court was recessed until 2:00 p.m., the same day.)

AFTERNOON SESSION

The COURT. Mr. Nixon was on the stand and Mr. Gondelman was cross-examining him, I believe.

[David George Nixon resumed the stand and testified further as follows]

CROSS-EXAMINATION (CONTINUED)

By Mr. GONDELMAN:

Q. Mr. Nixon, I show you what has been marked as Government Exhibit 3 and ask you again what is shown on that exhibit.

A. That is a photograph of Discharge No. 230.

Q. In your looking at that when you were there on August 7 and August 19, did you notice, as it is shown on the exhibit, a concrete pipe?

A. Yes, sir.

Q. Did you know that that concrete pipe is a two-foot concrete pipe?

A. That was our approximate measurement.

Q. Do you know where that concrete pipe came from?

A. At that moment, no, sir.

Q. Have you since learned where that concrete pipe comes from?

A. I believe it comes from Pennsylvania Industrial Chemical Company.

Q. Did you make any attempt to discover whether or not that concrete pipe is in fact a sewer which services the houses which abut the property of the Pennsylvania Industrial Chemical Corporation?

A. We didn't have the money to afford a title search. We didn't have enough money to afford an official title search. It is my understanding that the United States Attorney's office would do what was necessary along those lines.

Q. As far as you know then, since you didn't do a title search nor did you just go up around the property and look at it yourself, which would have only taken you time, you do not know whether there are houses which dump their sewage, their wash-

ing machine water and other household refuse, if you will, into a sewer which then runs into that pipe which you saw on the Monongahela River?

A. That's correct.

Q. And yet you knew, did you not, under the Act, that, if it was a public sewer——

Mr. THORNBURGH. Objection, Your Honor. The question is going to call for a legal conclusion.

The COURT. That's right. I am not sure myself, if it is a public sewer, if it makes any difference. So, I don't think you can ask this witness that.

Mr. GONDELMAN. Then I misunderstood you this morning.

By Mr. GONDELMAN:

Q. The fact is that you personally made no investigation to determine whether it was or was not a public sewer?

A. As I stated, we could not afford such an investigation.

Q. My question to you is whether you made any attempt. That would not cost you any money, so that we get away from this poor kick. Did you or did you not?

Mr. THORNBURGH. I object.

The COURT. Don't do that any more.

The Jury will ignore the phrase "This poor kick."

Please don't make any more comments like the poor kick.

By Mr. GONDELMAN:

Q. You did not in any manner, shape or form, whether it would cost money or not, attempt to discover whether the two-foot concrete pipe was or was not a public sewer?

A. Yes, we did make such attempts as we were capable of making.

Q. What attempt did you make?

A. We asked the gentlemen that were employed by the Corps of Engineers at the lock and dam, which is immediately across the river at perhaps a hundred yards upstream from the discharges in question, whose company that was and who was discharging effluent at that point. We were told by those gentlemen that that was Pennsylvania Industrial Chemical and that they were the ones who were doing the discharge.

Q. Did you make any investigation as to whether there was anyone else discharging into the same outlet which you took your effluent from?

A. No, sir.

Q. You testified that you had a bamboo pole which you used, or it wasn't you. Who used the bamboo pole?

A. Dr. Zavodni.

Q. And to the pole was attached the bottle which was used to get the sample?

A. On that pole there is a plastic cup effect into which the sample or into which effluent is collected. That is the construction of the pole.

Q. In other words, the pole is used for the plastic cup to get the effluent which was poured into the bottle?

A. Yes. If I might add something or correct some earlier testimony, at No. 230 this morning I mentioned that we used that device to collect from, that is, from 230. In effect, the only time it was used in those cases was from 231. At 230, as the picture shows, effluent is coming down and pouring into the river off of rocks and in a very excessible manner that one can reach from a canoe. And in those cases and in this case, John Zavodni reached out of the canoe, putting a funnel into the bottle, and collected this effluent in that fashion.

Q. Showing you Government Exhibits 2 and 3, you are saying that your sample was taken from the water which is shown coming down over the rocks; is that correct?

A. That's correct.

Q. And you did not use a pole then, but you took it from the flow as it is shown on those exhibits?

A. Yes, at approximately that point.

Q. You are indicating now on Government Exhibit 1 a point just below the red circle when you put on Government Exhibit 1?

A. That's correct.

Q. Was that taken only from the flow or from the river?

A. That was taken before the effluent entered the river.

Q. Now, as to No. 231 on Government Exhibit 6, is that the area in which the samples were taken?

A. Yes, it is.

Q. Where or how did you get the sample which is referred to as 231?

A. Sample 231-1 was collected by John Zavodni using the bamboo pole and that device that I mentioned earlier.

Q. And that's where the plastic cup was attached to; is that correct?

A. The plastic cup is attached to the end of the bamboo pole, that's correct. That pole was used only on one occasion at that spot.

Q. How far was it from the river to the wooden structure which is shown on Government Exhibit 6?

A. May I see this?

I would suspect that it is approximately 15 feet in a direct line.

Q. From the canoe then to where the water is shown coming off of this wooden structure would be about 15 feet?

A. That's just a rough guess. We did not attempt to take that measurement.

Q. How long was your bamboo pole?

A. About ten feet.

Q. Well, then, how did the bamboo pole which was ten feet reach a point which was fifteen feet from the river?

A. I never said it did. The effluent was collected after it comes out of the settling box and comes down on this step-looking affair. It flows over the rocks. The cup was situated somewhere over these rocks. As it poured over the rocks, it filled the device.

Q. So we understand it, then the effluent was not taken as it is shown dripping on your photograph from the wooden structure but rather after it had hit and filtered down over the rocks below the structure?

A. That is half true. That is on 231-1. On 231-2, the consulting engineer took a sample directly out of the settling box here.

Q. That was on the occasion of what, August 19?

A. Yes, sir.

Q. On that occasion when you went out to take your sample, there was someone who identified himself as a consulting engineer?

A. That's correct.

Q. And you told him what you were doing?

A. Yes.

Q. You said you would like to get a sample of the effluent which is shown on the picture flowing from the wooden structure?

A. Yes.

Q. And he took the bottle from you or from this doctor who was with you on that occasion?

A. Tom Young was with me on that occasion.

Q. And I guess Tom Young gave the bottle to him?

A. Yes, it was the quart bottle.

Q. And this gentleman, who identified himself as a consultant, filled it and gave it back to you?

A. Yes, he took the sample.

Q. Was there any discussion between you and that gentleman as to what he was a consultant for?

A. He said he was a consulting engineer or he was consulting for Pennsylvania Industrial Chemical Company. He didn't say precisely what his duties were.

Q. Now, in connection with your research, did you at any time check with the Commonwealth of Pennsylvania to determine whether the Pennsylvania Industrial Chemical Corporation had a permit under the state law——

Mr. THORNBURGH. Objection, Your Honor. The question is irrelevant.

The COURT. Irrelevant, incompetent and immaterial whether he did or didn't.

You will recall, ladies and gentlemen, in my original instructions I said you should draw no inferences when a question is asked, an objection made and the objection sustained. You must draw no inferences from the question being asked, what the answer would have been, at all. And, of course, the question in itself is never evidence.

By Mr. GONDELMAN:

Q. When you took your midstream samples, your serial numbers 511, as I understand it, you took them approximately directly across from the Pennsylvania Industrial Corporation plant; is that correct?

A. Yes, sir.

Q. Do you know whether the sample that you took from midstream would have contained any of the matters which were discharged into the river by the Defendant?

A. Do I know what the chemical composition of the river is?

Q. That is not my question.

A. I am sorry. Then I don't understand the question.

Q. My question to you is, when you went out to the middle of the river to take a sample from midstream, could you tell whether any of the sample which you took from midstream contained any matter which had been discharged from the Defendant's plant and had been carried to the point at which you took your sample?

A. I could not make that determination visually.

Q. You don't know whether it did or not? You don't know one way or the other?

A. I know I didn't make that judgment, yes.

Q. So we understand, you didn't make the judgment, but the answer to my question is you don't know whether it did or it didn't; is that correct?

A. That's correct.

Q. Thank you. After you took the samples, you said you took them where?

A. We took the samples and brought them back in the canoe, loaded them into my automobile or John's automobile as the case may be. They were then taken to the Biology or Science Building at Penn State, McKeesport campus. They were taken into the biology lab stockroom where they were stored under lock and key until such time as the man from Allegheny County was dispatched by Mr. Watts to pick them up and take them to the laboratory.

Q. On the samples taken August 7, 1970, how long were they stored at Penn State before they were picked up and taken to the Allegheny County Laboratory?

A. My memory is not—it seems to me it was the next day.

Q. How about the samples which were taken on August 19; when were they picked up?

A. Again, I think it was on the 20th, but I am not sure of those dates, sir.

Mr. GONDELMAN. I have no further questions.

The COURT. Have you any redirect?

Mr. THORNBURGH. Just two questions, Your Honor.

The COURT. Before you do that, I wonder if I could see counsel at side bar for a moment.

[At side bar.]

The COURT. In your question you made a point about a public sewer and said something about a public sewer and then you said you must have misunderstood me. Is there a distinction between a public sewer and a private sewer?

Mr. GONDELMAN. I don't know if there is, but this is a public sewer which is excepted in the Act.

The COURT. Sewers are excepted in the Act under certain conditions.

I want to know if there is any authority for the public situation, whether it is public or private.

Mr. GONDELMAN. I don't know of any.

The COURT. You added the word public.

Mr. GONDELMAN. I do not see the distinction, and I don't like to engage in an exercise simply because I want to look it up. This is a public sewer.

The COURT. Does that make any difference? That's what I am asking. If it does, I would like to see the authority.

Mr. GONDELMAN. The act says sewers are excepted. I am making it better. It is a public sewer which ought to be better than a private.

The COURT. Is there any authority that a different rule applies from a public to private that you know of?

Mr. GONDELMAN. I know of none.

Mr. THORNBURGH. The stipulation was that this pipe was owned by the chemical company; is that not right?

Mr. GONDELMAN. Sure.

Mr. THORNBURGH. It is owned by them?

Mr. GONDELMAN. Yes, but it is a receptacle of a public sewer.

Mr. THORNBURGH. You mean a public sewer flows into——

Mr. GONDELMAN. And out of it.

Mr. THORNBURGH. And that is all.:

The COURT. I couldn't see what public had to do with it.

Mr. GONDELMAN. I am simply attempting to show and I will show that this is a public sewer. Whether it makes any difference if it becomes a private sewer—I don't think it is, but I think is is even stronger.

[In open court.]

The WITNESS. Could I make a comment?

Mr. Gondelman this morning before lunch asked me if I had called the Press and I said that I had called Mr. Lutz at WQED. I was reminded over the lunch break by Mr. Lutz that it was he who called me and not the other way around. I just wanted to make that clear.

REDIRECT EXAMINATION

By Mr. THORNBURGH:

Q. Now, in your answer to Mr. Gondelman's question, Mr. Nixon, you indicated that the actual samples, except for the assistance of a man who identified himself as a consulting engineer, were taken from flow off of the rocks?

A. Yes, that's correct.

Q. Now, based on your recollection and referring again to these pictures here, were you able to observe where that flow off the rocks came from?

A. There was no question about it. The bank is completely dry——

Q. Let's take 230 here.

A. The bank in this entire area is dry. This is quite a sizeable flow, so there is no mistaking where that discharge comes from.

Q. That discharge was from the two-foot concrete pipe?

A. It was.

Q. Were there any other visible sources of the discharge in that area?

A. With the exception of 231, no.

Q. I am speaking now of the concrete pipe. Were there any other pipes in that area, anything else coming out of there?

A. We certainly didn't see anything, sir.

With respect to 231, I would ask you the same question. You indicated that the first sample there was taken from water that was flowing onto the rocks and down into the Monongahela River. Could you observe what the source of that was?

A. It is positively unmistakable that that effluent came from that pipe.

Q. Were there other pipes you saw in that area?

A. We saw none.

Q. No other discharge?

A. No.

Q. So that your testimony is, with respect to 230 and 231, to the best of your observation and knowledge, the samples that you collected, that Dr. Zavodni and Mr. Young collected off of the rocks were of liquid coming out of the identified sources of discharge that you have testified about?

A. That's correct.

Q. Do you have any question about that?

A. None whatsoever.

Mr. THORNBURGH. That is the only redirect I have, Your Honor.

RECROSS-EXAMINATION

By Mr. GONDELMAN:

Q. So we understand each other completely, Mr. Nixon, you say that the flow from which the samples were taken came from these pipes?

A. That's correct.

Q. However, you were unable to observe the source from which that flow came to get into the pipes?

A. That's correct.

Mr. GONDELMAN. That is all, sir. Thank you.

Mr. THORNBURGH. You are excused.

The COURT. Will anybody have further need for this witness?

Mr. THORNBURGH. I would not anticipate anything specific, Your Honor, but I would appreciate it if he would not be excused.

The COURT. All right.

Mr. THORNBURGH. Dr. John Zavodni.

[John J. Zavodni called as a witness on behalf of the Plaintiff, having been first duly sworn, was examined and testified as follows:]

DIRECT EXAMINATION

By Mr. THORNBURGH:

Q. Would you state your full name for the record, please?

A. John Joseph Zavodni.

Q. What is your address?

A. 751 Sylvester Way, McKeesport.

Q. How long have you lived there?

A. Approximately three years.

Q. How old are you?

A. Twenty-eight.

Q. And are you a native of Western Pennsylvania?

A. I was originally from Gallitzin, Pennsylvania, which is more central.

Q. Are you married?

A. Yes.

Q. Do you have any children?

A. No children.

Q. Where did you obtain your education?

A. My undergraduate degree is from St. Francis College in Biology, St. Francis of Loretto. My Doctorate is from Penn State University. It is in physiology.

Q. Dr. Zavodni, you are not a medical doctor?

A. No, a Ph.D.

Q. And that Ph.D. was in what subject?

A. Physiology.

Q. By whom are you presently employed?

A. Penn State University at McKeesport campus.

Q. What is your position?

A. Assistant Professor of Zoology.

Q. How long have you been in that position?

A. Three years.

The COURT. I wonder if we could find out what zoology is and what physiology is?

The WITNESS. We have only three titles, Professor of Biology, Zoology or Botany.

The COURT. I just want to know what they are.

The WITNESS. Biology would encompass both being authoritative in plant and animal organism. Zoology deals with animals. Physiology is a specialized study of the function of organism, how do the adrenal glands function, and so forth. Its basis is more or less like that of the medical practice.

By Mr. THORNBURGH:

Q. Are you a member of any scientific societies or organizations, Doctor?

A. Yes, several.

Q. What are those?

A. I was nominated for the New York Academy of Science and was elected in the Aerospace Medical Section; Pennsylvania Academy of Science and the Aerospace Physiological Section.

Q. Are there all honorary memberships, honorary societies?

A. The two honoraries I mentioned were Sigma Pi and Phi Kappa Pi. The others are non or working organizations where papers are given and so forth.

Q. Now, Dr. Zavodni, I think you were present in the courtroom this morning during Mr. Nixon's testimony and this afternoon, were you not?

A. Yes.

Q. And rather than repeat the questions that I asked him this morning, was the testimony that he gave, insofar as you are personally knowledgeable about the activities that he described, substantially correct?

A. Yes.

Q. And do you recall August 7, 1970?

A. Yes, I do.

Q. And was the description of your activities given this morning by Mr. Nixon substantially accurate specifically as to August 7, 1970?

A. Yes, it was.

Q. Let me ask you again. On August 19, 1970, Mr. Nixon testified that you were on vacation and that Mr. Young had accompanied him. Is that substantially as you recall it?

A. Right.

Q. Did you have an opportunity to talk to Mr. Young before August 19, 1970 with respect to this?

A. No, I didn't.

Q. Specifically with respect to the plan of action that Mr. Nixon descirbed to you in the spring of 1970, what was your role to have been in that operation?

A. Well, we were both going to take the samples, and then I had theorized that I would probably do the analysis. I had no idea how many samples we would have. I had some background, and I thought I could accumulate some equipment to get the analysis of the samples.

Q. Had you ever done sample analysis?

A. In some of my courses, yes, I had.

Q. Did you ever analyze any of these samples that were taken?

A. No.

Q. You have heard Mr. Nixon testify that he took the photographs described as Government Exhibits 1 through 6, I believe?

A. Yes.

Q. And does that comport with your recollection insofar as you were present on August 7?

A. Yes, he was in back of the canoe and he was taking pictures.

Q. When did you learn of the provision of the statute that provides for retainment of so-called bounty with respect to refuse dumped?

A. It was on the same day that Mr. Nixon came down and asked me if I would help him out, and he talked about the law. He said that, if there is any industrial waste being dumped in navigable waterways, there has to be a permit; and, if not, it is in violation of the Act. And I thought it sounded like we might be able to go out and, if anything is being dumped and there is no permit, be able to clean up the river in some way.

Now, there was another faculty member present, and it was only later when we walked out into the hall that he had mentioned to me that there was another part; the fines that could

be levied, could be shared or split amongst the individuals who turned in the information or supplied the information.

Q. Did Mr. Nixon put your participation on this project on the basis whereby you could make some money out of it?

A. No, because nothing was said about making money. We were just going to clean up the river if possible.

Q. Did he ever mention to you that his involvement in the project was viewed as a money-making operation?

A. No.

The COURT. Ladies and gentlemen, this is being given to you so you can weigh the testimony of these witnesses, determining their credibility, weigh the interest that they might have. Certainly, you would not be required to determine whether or not, if there were a fine, any part was to go to either of these men. It would not be a matter for you to consider. This is being given to you only so you can weigh the credibility of their testimony as influenced by the possible interest.

By Mr. THORNBURGH:

Q. Now, Dr. Zavodni, I want to direct your attention, as I did Mr. Nixon's, to the exhibits, the photographs.

First of all, the four photographs relating to what has been identified as Outfall 230; that is Government Exhibits 1 through 4. With respect to the discharge coming over the rocks, Mr. Nixon testified that you took the sample from that flow over the rocks; is that as you recall it?

A. Right. We could pull the canoe right up to the bank, and it was possible to reach over the canoe with a sample bottle and funnel and insert this to a stream of effluent coming out of the rock.

Q. Could you determine the source of that effluent visually?

A. In all indications, it seemed to be coming from this pipe up on top of the settling box. It was a direct stream. It was a direct stream coming down from that pipe.

Q. Did you see any other source of discharge in that area?

A. No, I did not.

Q. Based on your observation at that time and as with reference to Government Exhibits 1 through 4, where did you think that this was coming from?

A. From the concrete pipe in the settling box.

Q. With respect to 231, Government Exhibits 5 and 6, I would ask you the same question with respect to the first time that

you were there or the only time that you were there. You took that sample with the bamboo pole, Mr. Nixon said?

A. Right.

Q. And that was also off of a flow off the rocks?

A. The sample on 231 was taken higher up because it was a smaller flow and it spread out too much to collect it lower. So I used a sampling pole so I could collect the effluent running over the rocks.

Q. Could you tell what the source of that effluent running over the rocks was?

A. It was coming in all cases down the bank from the settling box. It was a narrow stream. The bank was wet on a parallel line.

Q. And there was no other apparent source of discharge that you saw?

A. None that I saw.

Q. Again, just to emphasize, Dr. Zavodni, you heard Mr. Nixon describe the manner and means in which the bottles were delivered to you from the County, were handled by you and the manner in which they were returned to the County. Was his testimony as you heard it substantially correct in that part?

A. Yes, it was.

Mr. THORNBURGH. Your Honor, Dr. Zavodni's testimony is mostly cumulative, and I don't want to take any more time with him. I turn him over to Mr. Gondelman.

CROSS-EXAMINATION

By Mr. GONDELMAN:

Q. Doctor, I think Mr. Thornburgh described Mr. Nixon as Mr. Clean. What did they give you as an appellation, if anything?

A. I guess I was Mr. Dirty then.

Q. Let me ask you; Mr. Nixon told you that, if an industrial concern did not have a Federal permit—you correct me if I am wrong. I think this is what you said in direct, that, if an industrial concern did not have a Federal permit, they were violating the Federal Refuse Act; is that what you said?

A. I think that is essentially what Mr. Nixon told me. Again, it has been a while so I may be wrong but that is what I recollect.

Q. That is the best of your recollection as to what he told you?

A. Right. And he added that there was a fine for violation of the Act, that people could be fined for dumping into the river.

Q. And he added later on that maybe you and he could share in the proceeds of that fine if the Court would so award it?

A. Yes. Later on he said the fine could be shared by the——

Q. I take it then that, since he told you that a firm could violate the Federal Act if it did not have a permit, that then you and he did investigate to determine which firms had a Federal permit before you went up and down the river collecting your samples?

A. Mr. Nixon took care of that, yes.

Q. He looked to see if they had permits?

A. Right.

Q. Not you?

A. No.

Q. And, as I understand it, referring to these exhibits, what you are saying is that the fluid that you see coming out of the pipe is where it came out of and you could see it flowing down the bank; is that correct?

A. We could see it flowing from the pipe.

Q. However, you could not see how it got into the pipe or source from which it got into the pipe or from where it came from?

A. No. sir.

Mr. GONDELMAN. That is all, sir.

Mr. THORNBURGH. No further questions.

The COURT. You may step down now.

Mr. THORNBURGH. Thomas Young.

[Thomas William Young called as a witness on behalf of the Plaintiff, having been first duly sworn, was examined and testified as follows:]

DIRECT EXAMINATION

By Mr. THORNBURGH:

Q. Would you state your full name for the record, please?

A. Thomas William Young.

Q. Where do you live, Mr. Young?

A. 3730 Lindell Street. It is in Castle Shannon.

Q. How long have you lived there?

A. Well, my parents have lived there about 19 years. I have lived there about 15.

Q. You live with your parents?

A. Yes.

Q. How old are you, Mr. Young?

A. Twenty-four.

Q. Are you married?

A. No, I am not.

Q. What is your present occupation?

A. I am a sophomore at Penn State University, McKeesport campus.

Q. You are in your second year there?

A. Yes, I am.

Q. Prior to that time, how were you occupied?

A. I was doing active duty in the United States Marine Corps, four years.

Q. Where did you serve during that time?

A. Various posts throughout the United States, 13 months in Vietnam.

Q. Are you attending Pennsylvania State University under the so-called GI Bill?

A. Yes, I am.

Q. What field of study are you in at Pennsylvania State University?

A. Presently I am enrolled as a political science major.

Q. Are you a student of Mr. David Nixon?

A. Yes, I am.

Q. Were you a student of his a year ago, in 1970?

A. Yes, I was.

Q. Now, again, rather than draw out your testimony, I will ask you if you were present in the courtroom this morning and this afternoon during the testimony of Mr. David Nixon?

A. Yes, I was here.

Q. And you heard Mr. Nixon testify with respect to your assistance given to him on the 19th of August, 1970?

A. That's correct.

Q. Was that testimony substantially correct as you now recall it?

A. Yes, it was.

Q. And it correctly described your activities with Mr. Nixon

at that time at sites 230, 231 and 511 which we have referred to through the course of this proceeding?

A. Yes, he did.

Q. I want to ask you particularly about the outfall at 231 which I believe is depicted in Government Exhibits 5 and 6 on your right there and in particular what your best recollection is of the activity that you undertook with respect to that outfall?

A. Well, on that particular day, August 19, we had just come out of Lock No. 3 and proceeded across the river to take a sample. This was a second sample that we did take at this site.

I distinctly recall in approaching the bank there was an extremely strong smell coming from someplace, and I mentioned it to Mr. Nixon. We remarked about it.

And as we approached the site, there was a man dressed in a white shirt and a hard hat toward the right-hand side as we were facing the wooden apparatus.

Q. Were you in the canoe at the time?

A. Yes, we were. And the man had asked us what we were doing or what we were about to do.

And Mr. Nixon answered him that we would like to take a sample at this point of this stuff being discharged. And the man said—well, we proceeded to get our bamboo pole to get to the procedure of taking the sample, and the man said, instead of going through all that trouble, he said, I will come down the bank, and he did come down the bank, capped the container from me, went back up and held the bottle with the funnel underneath the V part of the wooden apparatus and filled the quart container. He took out the funnel, recapped the bottle and, as he passed the container back to me, I noticed that the container itself—some had splashed around the edge and the funnel, and it had the same smell that I had smelled before or we both smelled as we had approached the shore.

Q. So that you actually didn't take the sample? It was taken by the gentleman on the shore?

A. That's correct.

Q. Did he identify himself to you, as you recall?

A. We asked—it was a very casual type of conversation. I don't think we challenged him or his authority. He didn't actually challenge us, but it came out in the conversation that he said he was a consulting engineer then working for Picco.

Q. That is Pennsylvania Industrial Chemical Company?

A. That's correct, yes, sir.

Q. Now, Mr. Young, I want to ask you the same questions with respect to the source of the discharge depicted in these six pictures here. Looking at what has been identified as Discharge No. 230, you took a sample of that on August 19, 1970?

A. Yes, I did.

Q. And that was taken at the water's edge?

A. Yes, sir.

Q. To the best of your recollection and looking at these pictures here, could you tell what the source of this effluent coming over the rocks was?

A. Yes, sir, the source was this concrete pipe at the top of the bank.

Q. Was there any other source, possible source, of that discharge that you saw on that day?

A. Not that I could see.

Q. Now, with respect to what has been identified as Discharge 231, I would ask you the same question. No, I won't because you didn't take that off of the rocks. That was taken, as I think you testified, by the gentleman?

A. Yes, sir.

Q. Now, before you were out on the river on that day, did Mr. Nixon give you any instructions as to how you were to proceed?

A. Yes, sir. He had asked me the night before if I would give him a hand in the canoe taking some samples on the Monongahela, and I told him that I would. So he proceeded to tell me that night approximately what I would have to do, how he did go about taking the samples. He continued when we did get on the river in the canoe, and the first few samples that I took that day were under his direct observation. I was making a few mistakes getting the feel of the pole and the procedure of it, and he corrected me; and, as we went along, he observed me until it was as best as I could do.

Q. Did you think you had the hang of it by the time you got to these, 230 and 231?

A. Yes, we took these on our return trip, coming back towards McKeesport.

Q. How did he happen to approach you to help him on August 19?

Mr. GONDELMAN. Objected to as immaterial. It is also a question which should have been asked of Mr. Nixon.

Mr. THORNBURGH. That's right. I will withdraw the question.

I don't have any further questions.

CROSS-EXAMINATION

By Mr. GONDELMAN:

Q. Mr. Young, as you observed, whether you took the samples or not, which you say you didn't, of Exhibit 6, all you are saying is that you saw the liquid state coming out of two pipes, and it was a liquid state?

A. Yes, out of this pipe.

Q. And you have no way of knowing, being down in the canoe, what the source of that liquid was prior to your seeing it coming out of these pipes and down the bank into the river?

A. No, sir.

Mr. GONDELMAN. O.K., thank you.

The COURT. You may step down.

Mr. THORNBURGH. Your Honor, do you intend to take an afternoon recess?

The COURT. I do. I wasn't going to take it for 20 minutes. You want it now instead?

Mr. THORNBURGH. As long as we are not going to eat up any more time. If we can take it now, it would be more appropriate. I would like to have a chance to confer with my next witness.

The COURT. All right, we will take a ten-minute recess.

(A short recess was taken after which the following proceedings were held in Open Court:)

Mr. THORNBURGH. I call Michael Watts.

[Michael R. Watts called as a witness on behalf of the Plaintiff, having been first duly sworn, was examined and testified as follows:]

DIRECT EXAMINATION

By Mr. THORNBURGH:

Q. Would you state your full name for the record, please?

A. Michael R. Watts.

Q. Where do you live?

A. 200 Walter Lane, Springdale, Pennsylvania.

Q. How long have you lived in the Springdale area?

A. Since 1925.

Q. By whom are you employed?

A. Allegheny County Bureau of Tests.

Q. In what capacity?

A. Chief of the Allegheny Bureau of Tests.

The COURT. Is there any question at all as to this man's competency or expertise?

Mr. GONDELMAN. I will stipulate to his competency and expertise and as to his reports in connection with the samples which were submitted to him on August 7 and August 19, 1970.

The COURT. Will you stipulate that the samples that he tested were the samples that were handed over to him?

Mr. GONDELMAN. By Mr. Nixon or Dr. Zavodni.

Mr. THORNBURGH. That is 230–1 and 230–2, 231–1, 231–2, 511–1 and 511–2 were in fact analyzed by Mr. Watts after having been received from Mr. Nixon and/or Dr. Zavodni and that the results of those tests are accurate.

The COURT. Is that all right, Mr. Gondelman?

Mr. GONDELMAN. I will so stipulate, Your Honor, as to those six tests, samples, six reports.

The COURT. Thank you, Mr. Gondelman.

Ladies and gentlemen of the Jury, that means, instead of going through all the routine, it is agreed that this man got these samples, that he tested them and the tests were accurate. All he has to do is to give us the results of these tests.

Mr. THORNBURGH. Your Honor, the first question was as to Mr. Watts' competency and expertise, his qualifications as an expert in water sample analysis.

Mr. GONDELMAN. Those are agreed on.

The COURT. He is an expert; he did test these six samples which he got from the people that you heard about, and his results are accurate. Now we are going to hear what his results were.

By Mr. THORNBURGH:

Q. Now, Mr. Watts, if you will refer to the results of your analysis. I refer you first to the sample designated 230–1.

Now, let me ask you first, Mr. Watts, just to clear our record here, when you received these quart bottles from Mr. Nixon or Dr. Zavodni, you received them only with the code designation on them?

A. That's correct.

Q. Did you not know from whence they came?

That's correct.

Q. With respect to 230–1, we will take a little bit longer with that one because it is the first one, with the Court's indulgence, so we get the ground rules.

That is on Page 36 of your addendum, 230–1. Are you there?

A. Right.

The COURT. Will you tell us what that is, on what date it was taken and whether it was from the concrete pipe or the iron pipe?

Mr. THORNBURGH. Shall I tell it?

The COURT. Yes.

Mr. THORNBURGH. The 230–1 is the sample taken from the concrete pipe on the 7th of August, 1970.

The COURT. In other words, that is Count 1 of the Information?

Mr. THORNBURGH. That's right, and I will go through them 1, 2, 3, 4.

The COURT. In order of the counts in the Information?

Mr. THORNBURGH. Yes, 230–1, 230–2, 231–1, 231–2.

By Mr. THORNBURGH:

Q. Now, first, as I said, on this initial go around, Mr. Watts, would you explain in as brief terms as you can the actual test that you conducted? That is, beginning at the top of the report page is the designation pH. Now, because we are all laymen in this area, we are going to have to rely on you to educate us.

Will you tell us what those tests were and then maybe, relating to the 230–1, what that result indicates?

A. As far as the pH test, we have a yardstick where we measure distance by inches as far as measuring the degree of alkalinity and acidity. We have a pH rule. We have found out that ordinary pure water has a pH of 7. That is neutral. Anything below, 6, 5, 4, 3, 1, zero is an increase in acidity. Anything above 7 is an increase in caustic alkalinity, up to 14.

Q. Would that have been the first test that you ran on all these tests?

A. That's correct. We have organic compounds whereby they have a specific area in color.

Q. Excuse me. I don't think we have to get into the actual test that you went through. I think it has been stipulated that you carried it out in conformity with accepted practice.

Mr. Watts, look at 230–1. What was the pH that you derived?

A. We got a pH of 8.8.

Q. What does that indicate to you?

A. Rather high pH that you don't normally find in natural waterways.

The COURT. It is not acidity?

The WITNESS. It is on a caustic side.

By Mr. THORNBURGH:

Q. What is the next test that you ran?

A. Alkalinity.

Q. What result did you get there?

A. 1070 parts per million.

Q. Would you explain just once what you mean when you say parts per million?

A. Take for example a pound of salt and a million pounds of water would be one part per million.

Q. One pound of salt in a million pounds of water, that is one part per million?

A. Right.

Q. So, what was the figure?

A. 1070.

Q. That is 1070 pounds of what?

A. In a million pounds of water.

Q. Of what?

A. Salts in terms of calcium carbonate.

Q. What would that indicate to you, 1070 parts per million?

A. That would be an unusually high alkalinity for an ordinary water.

Q. So, you got two tests so far, both of them indicating a degree of alkalinity?

A. A degree of pollution, I would say.

Q. Well, let's talk about the chemical qualities.

A. All right.

Q. What was the next test?

A. Ordinary hardness, 52 parts.

Q. What does that indicate to you?

A. That indicates to me—not knowing what the sample was at the very beginning, it indicates that there is very little calcium and manganese in there to give me a hardness test indicating that there is a lot of either the potassium or sodium salt in their radical, either one of the radicals to give you the softness.

Q. Is that hardness in the term that my wife would think it is hard or soft water?

A. The 52 parts per million, you divide that, 17.1 part per million is equivalent to one grain per gallon of hardness. So, the average public speaks of one, two, three or four or five grains of hardness per gallon. In this case here, 17 would be three gallons per grain of hardness.

Q. Is that hard or soft?

A. I would consider that soft.

Q. What is the next test that you got a result?

A. We got a high aluminum, 40.4 parts per million.

Q. That wasn't the next test performed?

A. Performed an iron test, four-tenths, which is a very small amount of iron in it.

Q. And the next one?

A. The next one was 40.4 parts of aluminum which is unusually high in ordinary water.

Q. What was the next test?

Q. Manganese, one-tenth. That could come from the equipment, sometimes from the water used.

Chlorides, 20 parts. That is not a very high figure. You would probably find 10, 15 parts in a normal stream.

Q. What about the next one?

A. Phosphate, zero.

Q. Zero is zero, I guess?

A. Right, indicating that there is no phosphate radical in there. No phosphate salt was used in the process.

Q. Next?

A. Sulphate, 262 parts. It is normal.

Q. And the next one?

A. Cyanide. We ran that and we didn't find any cyanide.

Q. Now, those tests were all run by you with respect to the concentration of the particular element that you were talking about?

A. Right.

Q. What was the next test that you performed?

A. Total solids.

Q. What do you mean by total solids?

A. What we do, we take a hundred cc. samples. We work with the metric system. It would be roughly over three ounces. We put in an operating dish which has been preweighed and put it on a water vat and the steam evaporates all of the water and all you have left is a residue like you have in a teakettle in boiling water. Then we put that in the oven to make sure it is

dehydrated, no moisture in there, in those salts, and we reweigh it again and you get the total solid figure there.

Q. Those were solids that were in the original sample that you used?

A. Right.

Q. What was the figure?

A. 12,898 which means 12,898 per million pounds of water.

Q. What does that indicate to you?

A. Well, that indicates that that is a very high amount of disolved solids. Normally, even in a river, you would be fortunate if you got 500 parts.

Q. Five hundred?

A. Five hundred parts during a dry spell.

Q. What was the next test that you performed?

A. Volatile solids. That is the difference between a fixed and the total. In other words, after we weigh the total, then we place that sample in a muffle electric furnace at about 1300 degrees centigrade. We burn that for an hour. It will carbonize what is there, organic matter or whatever else is in there. So, the difference in there between the two, which is fixed, we weigh that again and that means there is a loss. We have a loss. So, the loss of volatile solids is 753, and that could be due more so to inorganic chemical salts that would be changed from sodium carbonate to sodium oxide during the burning process.

Q. What is the figure for volatile solids?

A. 753.

Q. Does that indicate anything to you?

A. I just mentioned it. That is a somewhat low figure for the amount of salt and I would consider that as inorganic chemicals that are changed over from say soda ash or sodium carbonate to sodium oxide.

Q. What is the next test?

A. Fixed solids, 12,145.

Q. That is just the difference between the two?

A. Between those two.

Q. What is the final test that you made?

A. Suspended solids, 140 parts per million which anything over a hundred I consider should be considered.

Q. Now, those figures that you have just run through with respect to what we identified as 230–1 set forth in Count 1 of the Information, August 7, when were these tests performed?

A. They were submitted to the laboratory, 8/10/70, and we immediately started to analyze them.

Q. Mr. Watts, I would like next to direct your attention to Sample 511–1 which is on Page 37. That has been identified here in Court as the midstream sample taken on August 7, 1970.

I wonder if you would interpret the same figures out of Sample 511–1 that you just reviewed with respect to 230–1?

A. The pH is 6.4.

Q. What does that indicate?

A. That indicates that we have got some sort of acidity in that water.

Q. Would that be unusual for the Monongahela River?

A. No. And it also gives us some idea that there must be some acid salts that will hydrolyze; and, when they hydrolyze, it forms an acidity and uses up some of the alkalinity that you already have as a reserve. In other words, total alkalinity is 8 parts per million.

Q. That is the second test, right?

A. Right. Actually, we have no bicarbonate. We have no free mineral acidity because you only get that with a pH of 4, 4 or less. And we have total acidity due to acid and iron-aluminum salts. In this case we have—

Q. That is the first test?

A. Right.

Q. That is one that wasn't performed on 230–1?

A. The reason it wasn't performed there, we had different conditions.

Q. This is acidic and that was alkaline?

A. Right. In other words, we couldn't have any acidity due to iron-aluminum salts. Of a pH of 8, 8 would be blocked out when interfered.

Total acidity, I gave you. Hardness, 164.

Q. That is the fourth test?

A. Right.

Q. Nothing unusual there?

A. It is to be expected. We are getting water from the Maryland and West Virginia area and there is some coal mine drainage.

Iron, you have one-tenth. Aluminum, 1.1.

Q. Iron is No. 5 and aluminum is the sixth test?

A. Right. Aluminum is 1.1 part. Manganese, three-tenths of a part per million which is to be expected since we know we got iron-aluminum salts there. We know that could be from mine drainage or the company pickling liquors also.

Q. Chloride?

A. Nothing unusual, eight parts per million. That is slow. That is an indicator. If we have a high chloride, say 30, 35, it could be due to sewage. If it is higher than that, it could be due to industrial waste. If it goes on up higher, it could be overflow from spinned glass valves.

Phosphate, it's not too high, eight-tenth of a part per million.

Sulphate, 267 parts. That is not so high for the time of year that it was collected.

Cyanide, none.

Total solids, 348.

Volatile solids, 112.

Q. What about the total-solids figure? Is that an unusual figure, 348?

A. That was collected in August, and you are going into that dry spell where you don't have too much dilution. So, that would probably increase even by November. It might go all the way up to 500 parts per million.

Fixed solids, nothing unusual on that.

We didn't run any suspended solids.

Fixed solids, 236.

Condition of sample, I have potential acidity.

Mr. THORNBURGH. Excuse me, Mr. Watts.

Could we approach the bench for a minute, Your Honor?

[At side bar.]

Mr. THORNBURGH. I am waiting for some exhibits that will come down that will be more understandable to the Jury.

I have some small exhibits here, and I will go ahead, but the Corps of Engineers people are making them.

The COURT. What do you want to do?

Mr. THORNBURGH. I don't know.

Mr. GONDELMAN. I can't try his case. I am silent.

The COURT. I am not asking you for any comment. I am just thinking.

Mr. THORNBURGH. I want to ask for another recess.

The COURT. You want a recess?

Mr. THORNBURGH. I hate to do that.

The COURT. How long would it take?

Mr. THORNBURGH. They should have been here for 3:30 p.m.

The COURT. I will tell the Jury that we are waiting for some exhibits.

Mr. THORNBURGH. I apologize.

[In open court.]

The COURT. Ladies and gentlemen of the Jury, Mr. Thornburgh informs me that he is waiting for some exhibits. We are going to declare a recess until those exhibits get here at which time we will take up again. We will recess until those exhibits get here.

(A short recess was taken after which the following proceedings were held at side bar:)

The COURT. You are making an offer of two exhibits; is that correct?

Mr. THORNBURGH. That is correct. They are blowups of the agreed to reports of Mr. Watts, the chemist. The reason I was waiting for them, just reading them into the record would be weeks.

Mr. GONDELMAN. I stipulated as to the accuracy of Mr. Watts' reports. However, I did not stipulate as to their admissibility in evidence in their total.

The COURT. Of course.

Mr. GONDELMAN. And I call Your Honor's attention to the fact that the first count of the information charges them, the Defendant: The Defendant did deposit certain refuse matter, to wit, iron, aluminum and compounds containing these chemicals and chlorides, deleting phosphates and sulfates and getting into solids.

As far as I am concerned, the only way I knew how to prepare for this case, that we didn't deposit the specific matters that are set forth in the information, and the same goes for Count 2, 3 and 4. Now, when you get into the entire report, Your Honor will see that there are factors in the entire report which had nothing to do with the specific items which the Defendant is being charged with depositing into the Monongahela River.

The COURT. Right. So, what we will do, we will let them see these but not ask any questions about any part of them except those matters referred to in the indictment.

Mr. THORNBURGH. Let me clear up one matter that Mr. Gondelman specifically mentioned, the pH and alkalinity that relates to whether or not it is refuse. The only thing he can

object to is those that can be shown to be more present in river water than they are in samples.

The COURT. Unless they are those things which are relevant in the charge.

Mr. THORNBURGH. We won't ask anything except the ones we indicate—with pH and alkalinity.

The COURT. That you can ask about. Since the rest means nothing to me without the man interpreting, I am sure it won't mean anything to the jury.

Mr. THORNBURGH. I agree. We won't get to those.

The COURT. The jury looking at it, it will mean absolutely nothing to them.

Mr. GONDELMAN. They won't go out with the Jury. You are just going to have the testimony.

The COURT. Let's face that later. Even if it went out with them, they wouldn't mean anything to them.

Mr. GONDELMAN. It would because there are figures. Since they don't know what they mean, it can only help to confuse them if it gets to a Jury.

The COURT. Let's worry about that when that occurs.

Let's bring in the Jury now. We will go until 4:30 p.m.

[In open court.]

Mr. THORNBURGH. Your Honor, I apologize for the delay but, as Your Honor stated, sometime it is easier to wait for these things.

I have marked for identification the agreed upon blowups of the chemical analysis done by Mr. Watts.

Mr. Gondelman and I have no question with respect to the accuracy of the reports.

(Whereupon, Government Exhibit Nos. 7 and 8 were marked for identification.)

The COURT. Are they indicated as exhibits?

Mr. THORNBURGH. They are. I reviewed previously with Mr. Watts the analysis on 230–1, which is now blown up and marked as Government Exhibit No. 7, and Code 511–1, which is now blown up and marked as Government Exhibit No. 8.

The COURT. Is it agreed that those are blowups of the witness' report?

Mr. GONDELMAN. I am sure they are, Your Honor.

Mr. THORNBURGH. We would so represent.

The COURT. All right, fine.

By Mr. THORNBURGH:

Q. Now, Mr. Watts, I refer you in your report, the blowup of which is Exhibit No. 8. That is Code 511–1. That is on Page 37.

A. I have it here.

Q. And that is what has been previously identified as a so-called midstream sample?

A. Right.

Q. And I refer to the pH of 6.4, the alkalinity of 8.0. The concentration is on iron, aluminum, chlorides and total solids and ask if in your opinion that is a representative sample of Monongahela River waters. Was there anything unusual about that sample?

A. Not at that time of the year. I would say that is a representative sample.

Q. Now I would refer you next to the report of 230–1 which is at Page 36 of your report and marked for identification as Government Exhibit No. 7. Do you have that?

A. I have it.

Q. And I would refer you there to the pH of 8.8, the alkalinity of 1070, the iron concentration of .4 parts per million, the aluminum of 40.4, the chloride concentration of 20 and the total concentration of solids at 12,898 parts per million.

The COURT. Before the question is answered, would you offer those exhibits in evidence?

Mr. THORNBURGH. I will offer them in evidence at this time.

The COURT. Mr. Gondelman, any objection?

Mr. GONDELMAN. I have no objection except as to the matters I mentioned to Your Honor before.

The COURT. They will be admitted.

(Whereupon, Government Exhibit Nos. 7 and 8 were received in evidence.)

Mr. GONDELMAN. May I suggest to Your Honor, in view of the type of proceeding we are having, and it is unusual, I would ask Your Honor's leave to cross-examine on these matters at the conclusion of these exhibits. It will get difficult if I have to wait for later.

The COURT. That is reasonable.

Mr. THORNBURGH. Perfectly all right.

Mr. GONDELMAN. Thank you.

By Mr. THORNBURGH:

Q. Referring to those items I mentioned, Mr. Watts, in Government Exhibit No. 7——

A. That is 230-1?

Q. 230-1. I would ask in your opinion what the characteristics of the sample set forth on 230-1 were?

A. All the way down the line?

Q. The sum total of the characteristics, how you would characterize it.

A. Well, getting a pH of 8.8, I would consider that in the industrial waste category, for that high alkalinity of 1070 parts per million.

The hardness is very unusual; with that high pH it is very low.

Iron, it could even come from equipment, let alone the water.

Aluminum is unusually high.

Manganese, that could come from equipment.

Chloride is more than the normal that you would find in the stream.

No phosphate.

Sulfate is normal for a water supply.

Total solids, that is very unusual and very high, 12,898 parts per million.

Volatile solids, evidently due to some of the inorganic salts that are used in the process. Could change from a carbonate to oxide in a burning process.

Fixed solids, 12,145.

Suspended solids, 140. It is rather high, and I would say that the total solids are very high.

The alkalinity is very unusual for an ordinary—even for a water supply or even a municipal waste treatment—going into a municipal waste treatment plant.

Q. How would you characterize the discharge indicated on 230-1?

A. What would I say? What would I call it? I would call it an industrial waste.

Q. Based on the figures set forth on 230-1, would it be possible that this would be the type of discharge that would come from household use, in your experience?

A. Very impossible.

Q. From washing machines, dishwashers and the likes?

A. That's right. Ordinary sewage is what we call municipal waste. We haven't run any BOC here. Solids would probably be in the neighborhood of 500 parts per million overall.

Q. So, in your opinion, it would be impossible that this would be household waste?

A. Strictly impossible with that high total solids.

CROSS-EXAMINATION

By Mr. GONDELMAN:

Q. Mr. Watts, are you familiar with the Water Quality Control Standards in Pennsylvania?

Mr. THORNBURGH. Objection, Your Honor, the question is not relevant.

The COURT. Can I find out what these Water Control Standards are?

I don't know what they are.

Mr. GONDELMAN. He is the expert and knows.

The COURT. What are the Water Control Standards?

By Mr. GONDELMAN:

Q. You know what I mean by Water Quality Control?

A. Right.

Q. What do I mean by it?

A. The State Health Department has set up certain quality standards for all water supplies, industrial waste that are emptied into the streams of the Commonwealth, and the Federal Government is also setting up some standards as well.

Q. You say the State has set them up?

A. The State has and the Federal Government is working with the State Health Department. The Federal Government might even improve them, demand stricter quality standards than the State is.

Mr. THORNBURGH. I would renew my objection and ask that the answer be stricken.

The COURT. I wanted to find out what we are talking about. We have a Federal statute that forbids a certain kind of conduct. That is all we are passing on, and it wouldn't make any difference how the State standards are, whether they are high, low or indifferent.

A municipality could have no standards, and that wouldn't give you the right to throw waste into the river. So, I am going to sustain the objection.

Mr. GONDELMAN. May I take an exception because of some factors. I don't think that is a correct statement of the law.

The COURT. There is a proper place to correct any mistakes that I make.

By Mr. GONDELMAN:

Q. Are there Federal standards for water control, water quality control?

Mr. THORNBURGH. I object on the same basis.

The COURT. What we are concerned with is whether or not there was a deposit from a manufacturing establishment of refuse matter of any kind in these waters. Now, whether that will meet some other kind of standards, we are not concerned with. That is what we are concerned with. We have to keep our eye on the squirrel. We can't go under any other type of paths.

Mr. GONDELMAN. I am not going under any other paths. I am trying to find out what the refuse matter——

The COURT. That you may ask.

Mr. GONDELMAN. I asked about the Federal Government, whether the standards regarding the deposit of refuse matter in a navigable stream of——

The COURT. Go ahead. You want to know what refuse matter means. You can ask him.

Mr. GONDELMAN. My question is whether or not there is a Federal standard defining refuse matter.

The COURT. That defines refuse matter. Is there, sir?

The WITNESS. There is none. That is a broad statement, refuse. They do state that water supplies—that is the United States Public Health Department—that they should not contain any more than 500 parts per million total solids.

By Mr. GONDELMAN:

Q. That is the total supply that the City of Pittsburgh or South Pittsburgh Water gives to the households, that they furnish to the consuming public?

A. The better the raw water supply, the better quality of water they are going to furnish the consumer.

Q. But that is the water coming out. It's that water which goes to the water treatment facility plants.

A. Comes from the river.

Q. The Health Department of the United States has such standards, which you just referred to, which refer to the usage of water; is that correct?

A. For municipal water supplies, 500 parts per million total solids. That is what they recommend.

Q. Municipal water supplies?

A. That's correct.

Q. But I think you have testified that there is no such regulation concerning the discharge into a navigable stream of water?

A. That I do not know.

Q. Incidentally, the matter which was given to you is a quart bottle of material?

A. Unknown material.

Q. When you take that quart bottle of material and test it, you come up with Exhibit 7; is that correct?

A. Right.

Q. Now, do you know of your own knowledge and as an expert whether there is a method by which you should take your findings and convert them into the flow of the stream into which that matter has been deposited?

Mr. THORNBURGH. Objection, Your Honor, not relevant to this proceeding.

The COURT. Well, it's hard for me to rule on that because I don't frankly understand what you are asking about.

Mr. GONDELMAN. It is a simple question, Your Honor.

The COURT. Make it even a little simpler so I can understand it.

Mr. GONDELMAN. We all agree that we don't know much about water control.

Mr. THORNBURGH. I don't think, Your Honor, Mr. Gondelman's remarks are in order. I don't think there is any such agreement at all. I object to that.

The COURT. What we are really concerned with is not any kinds of standards but whether prohibited substances were dumped in the river. That's what we want to know. That's what the Jury——

Mr. GONDELMAN. You can't find that until you find out about the standards.

Mr. THORNBURGH. I object to Mr. Gondelman's testimony.

Mr. GONDELMAN. May I suggest, if Your Honor please, because I don't want to discuss the law across the room, can we adjourn and discuss what the law is so I can ask questions as to what I think is relevant?

The COURT. You ask the questions and, if Mr. Thornburgh objects, I will rule.

By Mr. GONDELMAN:

Q. Mr. Watts, what I was trying to get to is whether or not you know whether there is any method by which an expert in water and water quality control could take the substance which

is flowing from a pipe, measure that substance and then convert it into what its effect would be in the river? Do you understand that question?

A. I understand it.

Q. Can you answer it?

A. Well, to begin with, you have to know the flow of the river, cubic feet per second. And, secondly, we are still—this is a great age of technology where we have gone to the moon. In other words, you are inferring, why don't we continue treating waste by dilution processes.

Q. No, I am not inferring that at all. I am trying to find out whether you know the method by which the rate of a substance in a river is determined, and you did say you knew it because it does depend, does it not, on the rate of water flow in the river?

A. You have to know the amount of water that is flowing by with the amount of water that you are discharging there to get the parts per million there. And you are speaking, possibly with your case here, in not only parts per million, it would probably be parts per billion.

The COURT. Is there a difference if you put a certain substance in distilled water than if you put it in river water and the result that comes out?

The WITNESS. That all depends on the combination, what you have in the river water and what you don't have in distilled water.

The COURT. Is it affected by how large a substance of water you put something into?

The WITNESS. If you want to call it dilution.

The COURT. If you drop something in Lake Erie, will that have the same effect as if you drop it in the river?

The WITNESS. You have a different condition there. You can say that that is a quiescent body of water, and with the river it is a continuously flowing stream, and that is a condition you have in Lake Erie today.

The COURT. That's the point that I have been trying to get at. Congress has said you can't drop certain things in water, and whether you drop them in Lake Erie or the Monongehela River or Niagara Falls, you are not allowed to do it, I understand, if it is navigable. So, what the standards are I think is irrelevant and that is the way I rule.

Mr. GONDELMAN. I would like again to explain to Your Honor why it isn't because in my honorable opinion it is most relevant.

The COURT. We will recess the Jury until 10:00 tomorrow morning to give you that opportunity.

Mr. GONDELMAN. Thank you, sir.

(Whereupon, at 4:25 p.m., the Jury was recessed until 10:00 a.m., the following day.)

The COURT. I want to get some ground rules first. You look at 1171 of the Code. It provides that nothing that is contained in 1151 through 1175 derogates what is in 407 and 411.

Mr. GONDELMAN. That is what it says.

The COURT. Yes, it does. 1151 and 1175 are matters which we are not concerned in this case. We are concerned with 407. The Supreme Court of the United States has defined refuse as including all foreign substances and pollutants with certain exceptions.

Mr. GONDELMAN. What date did they decide that?

The COURT. 1966.

Mr. GONDELMAN. That is prior to the Water Pollution Control Act that you are now telling me it doesn't apply.

The COURT. Merely for the definition.

Mr. GONDELMAN. Prior to the Act which defines it.

The COURT. Give me the definition of it and tell me where you contend it is defined.

Mr. GONDELMAN. In 1151.

The COURT. That has nothing to do with 407.

Mr. GONDELMAN. If Your Honor has made up his mind so firmly that I cannot argue the fact because what you do not realize at this point, and I would like to suggest to Your Honor, is this.

The COURT. You are arguing your contentions.

Mr. GONDELMAN. I am arguing my view of the law which is the only way this Act will make any sense.

My client is faced with a criminal violation, which I would like to have treated with some degree of resolve of the various acts which confront an industrial concern in the United States in 1971.

The COURT. I told you my present thinking. If you can change it, go ahead.

Mr. GONDELMAN. Now, in 1151 through 1174 or 1175, you will find that Congress has set up a system which did not exist before this which it states certification is required.

The Federal Register, which I referred Your Honor to, sets up a system whereby an industrial concern can now for the

first time in its life secure a permit. It could not do this before. But, under the law as it existed when this information was filed, the law in this country is that before you can now get a Federal permit, which you still can't get because they don't have them set up you must get State certification. The State certification sets up standards in the United States in navigable waters which in the Monongahela River have been adopted by the Federal Government.

What Your Honor is saying to me is that despite the fact that the Federal Government has adopted, not just State standards—in a couple of cases these were State standards, but now in the Act of 1970 the Federal Government says we will cooperate with the State and the State may set up the State standards that we will adopt if they meet our standards, and they have so done in the case of the Monongahela River.

So, we now know what the Federal Government considers to be refuse matters in the Monongahela River.

The COURT. Insofar as getting a permit.

Mr. GONDELMAN. Insofar as refuse matter is concerned.

What Your Honor is saying——

The COURT. I am saying that I don't agree.

Mr. GONDELMAN. You will define refuse matter getting a permit contrary to defining refuse matter defined in 407, but the fact that the same permit refers to the refuse matter——

The COURT. That is your contention.

Mr. GONDELMAN. That is part of my contention.

The COURT. What does Mr. Thornburgh have to say?

Mr. THORNBURGH. It is a simple matter of looking at the two Acts and their harmony. One is a Water Pollution Control Act which has to do with water quality standards, a joint or mutual effort on the part of the Federal, State and Local Governments to devise a water pollution control act.

The Act that we have been talking about has been on the books. It is a refuse act. It has to do with the discharge of refuse, and the sole question which the Act of 1899 addresses itself to is whether or not there is a deposit of refuse in a navigable water of the United States.

As the Court pointed out in the United States Steel case in the Northern District of Indiana, which is attached as a copy to our trial memorandum and as we dealt in the Interlake Steel Corporation in the Northern District of Illinois, that this harmony can be established and must be particular because the

Water Pollution Control Act in 1151 said that this chapter shall not be construed as affecting or impairing the provisions of Section 407. That is, the Refuse Act which was on the books then remains on the books today and remains unaffected under any—

The COURT. What you are saying is that 407 must be interpreted in the light of the Act of 1970?

Mr. GONDELMAN. I further say this: A holding by this Court that in effect the deposit of anything that somebody thinks is refuse without any standard or definition of refuse is a violation of the law without any up until 1971, July 1, which is when we have, incidentally, to comply with the law under 407 by the Federal Register.

The COURT. That is a different point.

Mr. THORNBURGH. Let me get to the question of standards. There is an absolute standard in the Supreme Court of the United States in the United States versus Standard Oil where they gave refuse——

The COURT. That is the 1966 case that I was referring to. That is the one I have here.

Mr. THORNBURGH. That's right. It was commercially valuable high octane fuel that was being discharged, and it is made clear by the language of that case that the term refuse matter is to be given a very broad meaning.

The COURT. Let me ask you something. You don't expect the jury to pass on these kind of questions?

Mr. GONDELMAN. I was willing to go on a non-jury a long time ago.

Mr. THORNBURGH. We accepted the Jury under proper instructions.

The COURT. They can't reach those kind of rulings. The only thing they are going to be able to decide is the factual issues, whether or not certain things were put in the river by this Defendant. The rest of these things——

Mr. THORNBURGH. I don't know what issues there are remaining in this case.

The COURT. I am having trouble understanding since you have conceded everything. You conceded that these things get into the river.

Mr. GONDELMAN. Of course. What I am saying, Your Honor, is that what was put in the river is not refuse, and a Jury in this courtroom is not going to be able to so find.

The COURT. They are not going to be able to compare the 1970 Act with the old Act. That is a legal problem.

Mr. GONDELMAN. There is a legal question of whether we should be here at all in light of the Federal Register Regulation put out by the United States of America and which has now said, in light of the Court's opinion, that we have until July 1, 1971 to get a permit.

The COURT. We are not going to that point. We are not there now. Right now what I am concerned with is whether or not the standards adopted by the Commonwealth of Pennsylvania or the Federal Government, if there are any—I don't know whether there are any—whether they have anything to do with the Refuse Act.

Mr. GONDELMAN. My contention, if I may say it, Your Honor, is that it has to because—let me demonstrate the absurdity of this. If we proceed for a permit, not under 411 or 419 or 407 even because you say we are going to take the standards on an act which has no application to 407, we are going to the Act of 1970. Look how absurd that is. We go to that Act and find that the Federal Government has said we adopt the State of Pennsylvania's Stream Pollution Control Standards.

The COURT. For a different purpose.

Mr. GONDELMAN. That is exactly the point.

We then go, under the Act of 1970, and we get a permit. And then we are indicted under the Act of 1899 because what is said under the Act of 1970 doesn't define refuse under the Act of 1899, and you are guilty of violating a law of the United States of America which another agency says you are——

Mr. THORNBURGH. I would rather talk about the facts of this case than a hypothetical.

The COURT. I understand your contentions. I think I understand the Government's contentions. We are in recess until tomorrow morning which will give me a chance to think this over.

Mr. GONDELMAN. May I just bring the facts to Your Honor why I think it is so important that the matters which this Defendant is charged with dumping in the Monongahela River are within the standards of Article 301 of the Pennsylvania Quality Control Standards.

The COURT. That makes no difference to me whatsoever. I am firmly convinced that makes no difference.

Mr. GONDELMAN. Article 301 of the Pennsylvania Standards has been adopted by the United States Government in April of 1970. Therefore, ——

The COURT. That is the problem that I want to check out.

Mr. GONDELMAN. But I have to demonstrate to you why I am willing to admit everything here because, in fact, what we are admitting is that what we are placing in the Monongahela River complies with—you have to understand this too. You cannot get a Federal permit without a State certification.

The COURT. The question is, without a permit, can you do it? If the Federal Government passes a law that you cannot blow bubbles out of a bubble pipe, the fact that 13 states say you can doesn't make a bit of difference. And, also, if there are no permits, you cannot do it either.

Mr. GONDELMAN. That may not be true. That part may not be true because, when you get to the fact that there is no permit, when you get to the fact that nobody ever implemented—the Government of the United States itself didn't implement permits—you then get into the criminal intent.

The COURT. The narcotics legislation says it is unlawful to have heroin unless it is legally imported in the United States, and it is not legally imported. So, your argument is that it is perfectly all right to have heroin because you can't get legal heroin.

Mr. GONDELMAN. Of course not. It is very easy if you don't get into narcotics.

What I am talking about is whether this country could have won World War II in the stupid interpretation of this Act because in this case not one industrial concern in the United States of America could have operated and made the equipment necessary to win a war.

And now, 30 years later, they suddenly find an act and——

Mr. THORNBURGH. On behalf of the Justice Department, may I point out that his interpretation is made——

The COURT. The Jury is not in the box, and how we won World War II has nothing to do with it. I don't pass the laws.

Mr. GONDELMAN. You have to interpret them.

The COURT. That you should address to Congress.

Mr. GONDELMAN. You must interpret the law with some sense of what it has been doing for 72 years, how it has been applied for 72 years, what the Corps of Engineers thought for

72 years, before you can convict a Defendant of intentionally violating that law.

The COURT. You know, when I was with the Government, I thought a lot of things, and we did things on that basis, and now the Supreme Court says you are wrong, you are not going to do them. So, now all those things change. You know a lot of people were convicted of crimes on confessions. And today the Supreme Court doesn't say we have been listening for 150 years, therefore, we are going to go on listening. They are not.

Whatever somebody did in the past, I don't know. I only have this case in front of me with this statute.

Mr. GONDELMAN. Has Your Honor read the Federal Register?

The COURT. No.

Mr. GONDELMAN. You must read the Federal Register before you understand because I am not saying not only the Corps of Engineers, the President of the United States——

The COURT. You have proper opportunity to present it to me and I will read it.

Mr. GONDELMAN. The Federal Register?

The COURT. Sure. Aren't you going to put it in evidence?

Mr. GONDELMAN. I think you should have it right now. I have cited it in my brief.

The COURT. We are going to take into consideration everything you read, but I am not going to decide this case. We are not going to waive the flag. We are not going to talk about World War II. If it has that effect, then Congress I am sure in its wisdom will change the law.

Mr. GONDELMAN. Congress has by giving you standards and not of that absurd effect.

The COURT. You don't help your argument by referring to Mr. Thornburgh's argument as absurd. That is name calling.

Mr. GONDELMAN. I am not calling him names.

The COURT. No, you are calling his argument names.

Mr. GONDELMAN. The fact is, if you are going to interpret this Act in any sense of understanding why Congress passed an Act of 1970——

The COURT. I am going to certainly try to.

Mr. GONDELMAN. The only way you can do it is by having the standard in the subsequent act be the standard of refuse matter being deposited. Otherwise you can't get a permit.

Mr. THORNBURGH. May I raise one point? Mr. Gondelman makes frequent reference to the inability of his client to get a

permit. And I would press on Your Honor at this time—it is the first time I have had a chance to press it—the fact that 407 requires that before a discharge is made that a permit be applied for. It is not even suggested here that his client before this discharge occurred applied for a permit.

The COURT. There was no place to apply. It makes no difference.

I recall, when I was in the Republic of Bolivia, it came to my attention that you couldn't carry a cigarette lighter without a license. So, I went to wherever it was that you went to get a license, and they said that they haven't had licenses for years and they confiscated it.

Mr. GONDELMAN. That is why I am glad I live in the United States of America. We don't interpret that way. Maybe Bolivia has a better standard. I don't like the Bolivian standard, and we ought to use the Democratic process.

The COURT. The Democratic process, as I understand it, is to interpret the laws. However, I have heard your contentions and the Government's contentions. We will rule on it tomorrow morning, and I hope I am right in whatever way I rule. If I am wrong, as you well know, there is another tribunal that can correct anything I do.

Mr. GONDELMAN. That is not a place to go, but, if you are wrong, of course I have my rights, but I would like it to be right here and get rid of this case here.

The COURT. We are going to try to and try to do it in the way we see it is right.

Of course, there are two different views and somebody is not going to agree with me in whichever way I rule.

(Whereupon, at 4:40 p.m., Court was recessed until Friday, June 25, 1971, at 10:00 a.m.)

CERTIFICATE

I hereby certify that the foregoing is a true and correct transcript of my stenotype notes of the proceedings held before the Honorable Hubert I. Teitelbaum and a Jury on June 24, 1971.

VIRGINIA T. BENGEL,
Reporter.

TRANSCRIPT OF OFFICIAL NOTES OF TESTIMONY

In the United States District Court for the Western District of Pennsylvania

Criminal Action No. 71-75

UNITED STATES OF AMERICA, PLAINTIFF

vs.

PENNSYLVANIA INDUSTRIAL CHEMICAL CORPORATION, DEFENDANT

Pittsburgh, Pennsylvania, June 25, 28 and 29, 1971

Before: Hon. HUBERT I. TEITELBAUM, J., and a Jury.

APPEARANCES

For the Plaintiff: Richard L. Thornburgh, United States Attorney, and James Seif, Assistant United States Attorney.
For the Defendant: Harold Gondelman, Esq.

TRANSCRIPT OF OFFICIAL NOTES OF TESTIMONY

Proceedings

The COURT. Gentlemen, I have now given consideration, of course, to the contention that the Federal Water Pollution Control Act as amended affects the definition of refuse under the Refuse Act of 1899. I have considered the Act of 1948, which is the Federal Water Pollution Control Act as amended as late as 1970, and in my opinion there is no question at all that the standards adopted by the Commonwealth of Pennsylvania, whether or not they have been approved and adopted by the Secretary of Interior, are totally irrelevant, and I will therefore sustain the objection of the Government and will not permit any further questions about it, and I don't want any

further argument on the subject. We have read the acts. There are two other Federal Court decisions deciding this exactly that way. There are no decisions at all sustaining the position of the Defendants. I am going to follow the decision of the Northern District of Indiana in U.S. versus U.S. Steel, and the Northern District of Illinois in U.S. versus Illinois, which considered this very problem and decided it this way.

Mr. GONDELMAN. I just want to ask Your Honor if you have also considered then the Federal Register and the——

The COURT. I have.

Mr. GONDELMAN (continuing). And the fact that the Government by its agencies subsequent to those acts has, in fact, stated that the Federal Government itself recognizes the primacy of the states in establishing water quality standards.

The COURT. Yes, but they also state that the Corps of Engineers can deny a permit even if the water control standards are met. They say that specifically by regulation. No person can assume for himself that, absent a permit, he can pollute the water. Whether it complies with the state standards or not the Corps of Engineers could turn him down anyway, so he can't just go ahead and do it without a permit. Furthermore, these companies have now applied for a permit, so we are not talking about winning World War III. That is my ruling. I am not prepared to listen to any further argument on it.

Bring in the jury.

(Jury returned to the courtroom.)

The COURT. Ladies and gentlemen of the jury, you will recall that when we recessed last night we did so to consider whether or not the provisions of the water standards as adopted by the Commonwealth of Pennsylvania are relevant in your decision as to whether or not a person is guilty of a criminal offense under the Refuse Act of 1899. I have ruled, after giving it overnight consideration, that those standards are totally irrelevant to anything we have before us here, so if you heard anything about those, just completely eliminate that from your mind as to what is provided by the water standards of the Commonwealth of Pennsylvania and whether or not they have been adopted by the Commonwealth of Pennsylvania. That is totally irrelevant since if there was no permit as set up in the Act that we are concerned with, Section 407 of the Refuse Act of 1899, if there was no permit it is a violation if there was refuse deposited in the navigable waters, so you don't have to concern

yourselves at all with what is in the Pennsylvania Water Standards Act provisions or Federal provisions, if there are any.

MICHAEL R. WATTS, having been previously duly sworn, resumed the stand and testified further as follows:

CROSS-EXAMINATION

By Mr. GONDELMAN:

Q. As I understand you, you have your reports which are Exhibit 7 and Exhibit 8 in front of you. Is that right?

A. Exhibits 7 and 8. In number, what would they be? 230–1?

Q. That's Exhibit 7.

A. And 511–1?

Q. That's Exhibit 8. All right. Now, on those exhibits I was asking you whether in connection with Exhibit 7 the matter which you had was, first of all, in a liquid state. Was it not?

A. You are speaking of 230–1?

Q. Yes, sir.

A. It was in a liquid state.

The COURT. May I ask in this regard, were the metal deposits that you have talked about, the solid deposits, were they suspended——

The WITNESS. They were suspended matter in the liquid sample that was submitted to us in the lab.

The COURT. But they themselves, those solids, were they liquid or solid?

The WITNESS. Well, that would be solid, suspended.

By Mr. GONDELMAN:

Q. As used in water expertise, when you refer to the content of the bottle that you received, I again say, it was in a liquid state, was it not?

A. We speak of it that way. If you shake the bottle up there may be some suspended matter in the liquid.

Q. And there also may be some dissolved matter within the liquids which, if you go through your process of getting rid of the liquid, you would then get to crystals and other matters?

A. Right.

The COURT. That was the point of my question. I want to know whether it was dissolved or suspended.

By Mr. GONDELMAN:

Q. There were both, were there not?

A. Correct, both.

Q. But the fact is, it was still in your expertise jargon, in

the language that you experts use, the matter was in a liquid state. Is that correct?

A. Right.

Q. When you show on your Exhibit 230-1, aluminum, are you talking about aluminum as we know it on a door or on a building, as a metal, or are you talking in terms of that aluminum being a salt?

A. Aluminum hydroxide, being an insoluble suspended matter which is converted to aluminum in my report.

Q. When you say it was aluminum hydroxide, could you tell whether it was also aluminum, what, chloride or hydrochloride?

A. There could be a possibility that it could be a chloride in there.

Q. So then the aluminum that you found might have come from an aluminum chloride?

A. There is a possibility.

Q. Or it might have been an aluminum sulphate?

A. Sulphate, correct.

Q. And it is a fact, is it not, sir, that aluminum in the hydrochloride or in the sulphate state is used by water treatment plants in processing their water; if you know?

A. True.

Q. In other words, in the purification of water we use aluminum chloride or aluminum sulphate?

A. Correct. However, I could add something to that statement, that if you use aluminum or aluminum chloride or aluminum sulphate in water treatment, you wouldn't end up with a product of 40.4 parts of aluminum in the potable water that you are supplying the people.

Q. How about 1.1?

A. There is a possibility of getting it 1.1, but not 40.4.

Q. When we take the 40.4, you are talking about 40.4 as you have it in its form in the quart bottle that was given to you. Is that right?

A. Right.

Q. And in order to determine the effect of that 40.4 as it is deposited into the Monongahela River, you would have to know the rate of the water flow and the amount of water into which that aluminum chloride or sulphate was going into?

Mr. Thornburgh. Objection, Your Honor. It is irrelevant.

The Court. Let's hear the answer.

A. Naturally there would be some deposit.

By Mr. GONDELMAN:

Q. I don't think the answer is responsive, or maybe my question was confusing.

The COURT. Restate your question.

Q. When you have the 40.4 of aluminum as you got it in this bottle which came from a pipe, if that were then permitted to flow into the Monongahela River, in order to determine its effect in the Monongahela River and its then percentage content in the river you would have to know the amount of water in the river and the rate of flow in the river and other factors, would you not?

Mr. THORNBURGH. I renew my objection, Your Honor.

The COURT. Yes. Sustained.

Mr. GONDELMAN. If the Court please, there is a comparison of what was in the river——

The COURT. I am concerned with what was in the water that was put in the river, not with the effect of it after it got—that's the same thing as the water standards that you are talking about, and I have ruled on it.

Mr. GONDELMAN. No, it is not. I have asked whether or not——

The COURT. You may be right, but I have sustained the objection. Proceed to something else.

By Mr. GONDELMAN:

Q. Incidentally, as you look at 511–1 and 230–1, the Government has charged this Defendant with discharging into the river iron. Would you tell me if you, in your expert opinion, would consider the pure analysis of iron at 0.4 at 230–1—where in the midstream at 511–1 that is 0.1—would you consider the addition of 0.3 iron as being a large amount of iron or any amount of iron at all?

Mr. THORNBURGH. Objection, Your Honor. The question as to the large amount of iron is not within the purview of these charges. The question is whether any iron is deposited.

Mr. GONDELMAN. I would, of course, except to that because we have got to get to the point—

The COURT. Well, that may have some relevance, so we will go ahead.

A. No. I would consider that 0.4 could come from processing the material at that plant, from equipment, wear and tear of equipment, so that is a very small amount. However, in making an analysis of iron and aluminum it is a double process. There-

fore while we are looking for aluminum we pick up and determine iron at the same time.

The COURT. Could that iron get in there through any other source except from this Defendant?

The WITNESS. Oh, yes, this is a possibility. To begin with, this 511–1 was collected above the source of the discharge.

By Mr. GONDELMAN:

Q. And in your direct testimony you found that not to be high and you weren't particularly concerned with it.

A. That's right.

Mr. THORNBURGH. Objection.

The COURT. Yes, but he said it came from above the source of the discharge, so why are we concerned with it?

Mr. GONDELMAN. I am concerned with it because the Defendant is charged with violating the law by putting it in the stream and I want to move to correct this information.

The COURT. This witness is not going to testify as to whether or not the law was violated. That is a question for the jury. The testimony right now is the sample of the iron came from above the point of the discharge. At the appropriate time you can argue it. Whether it is a whole lot or a little bit doesn't make any difference. It came in before the point of discharge, was there before the point of discharge.

As to sulphate, Mr. Watts, you found that 262 was normal. That was your direct testimony, I believe; did you not?

A. I believe.

Q. So that as to sulphate 262, you did say in your direct testimony when Mr. Thornburgh asked a question that it was normal.

Mr. THORNBURGH. I object to this question, Your Honor. Discharging sulphate is not charged here.

Mr. GONDELMAN. He was asked about it on direct examination.

The COURT. Answer the question. I can't recall whether he was or wasn't. We will let him answer it.

A. That amount in 230–1, 262, and in 511–1, 267, I have nothing to quarrel with there. That's a normal discharge that you would find in the stream as well as in the waste that we are speaking of here, in that particular sample.

The COURT. And sulphates, of course, are not a part of the charge. There was a normal amount of sulphate.

Mr. GONDELMAN. I realize that, Your Honor. That was part of his direct testimony.

The COURT. All right.

Q. In fact, in the sample which you examined there was less sulphate being discharged into the stream than is shown in your Exhibit 511-1. Is that correct?

A. Correct. However, in my testimony I also mentioned that I wasn't concerned too much with the sulphate. I was concerned with the high pH and the high alkalinity and the high total solids.

Q. We know what you're concerned with, but the fact is you still ran an expert test with a desire to be accurate, did you not?

A. Right.

Q. So you were accurate in your finding of sulphate at 262.0 in 230-1 and you were accurate in the finding that in midstream there is 267.0 in your Exhibit 511-1. Is that correct?

Mr. THORNBURGH. I don't see any relevance to the examination as to sulphates. It isn't charged in the information, Your Honor.

The COURT. We are going to let him go ahead with it.

Mr. GONDELMAN. He asked about it, I think.

The COURT. All right. You know if you argue after I make a ruling, I reserve the right to change it.

Q. Then it is correct, is it not, that there is more sulphate in midstream than there was discharged into the river?

A. According to the analysis.

Q. And it was your analysis?

A. Right.

Q. And it is accurate?

A. Yes, sir.

Q. Your testimony as to 230-1, that is, those figures relate to pounds per million. Is that correct?

A. Per million pounds of water.

Q. In other words, it is per million pounds of whatever you found on the exhibit as relating to per million pounds of water?

A. Right, or if you want to convert it into millions of gallons or per million gallons of water, one part per million is equivalent to 8.34 pounds per million gallons of water.

Mr. GONDELMAN. That's all.

The COURT. Mr. Thornburgh, do you want to go ahead with the rest of your direct?

Mr. THORNBURGH. Can I ask a couple of questions with respect to redirect?

The COURT. Sure, you can.

REDIRECT EXAMINATION

By Mr. THORNBURGH:

Q. Mr. Watts, you refer to these samples having been received in a liquid state. Have you ever received any samples for water analysis in other than a liquid state?

A. Well, would you call it semi-liquid—some of the flocculent material, half of it might be settled out and the other half is in a liquid state.

Q. Well, you have never received anything in a solid or gaseous state for water analysis, have you?

A. No.

DIRECT EXAMINATION

By Mr. THORNBURGH:

Q. I am going to refer next, Mr. Watts, to Government's Exhibit No. 9 which is sample 231–1 on page thirty-six of your report.

The COURT. Will you offer it in evidence.

Mr. THORNBURGH. I will at this time offer Government Exhibit 9 into evidence.

The COURT. Any objection?

Mr. GONDELMAN. Same objection.

The COURT. Same ruling. It is admitted.

(Whereunpon, Government Exhibit No. 9 was admitted into evidence.)

Q. Mr. Watts, what I am referring you to is Government Exhibit No. 9, being code No. 231–1, already identified as having been collected at the source of discharge on August 7, 1970. That is the second sample that was obtained on August 7, 1970. I wonder if you would review the results of the tests made on sample 231–1 for the jury with respect to pH.

A. Well, we found sort of a normal pH of 7.6 which you would find in natural waters. The alkalinity, however, was very unusual, very high, 8,200 parts per million. We will go on down to hardness. Hardness is 0. Looking at that figure and that alkalinity, one would assume that there was some sort of a sodium or potassium salt used in the process somewhere that ends up in this industrial waste. Iron, 1.4 parts per million. That's a little higher than in the previous one, but nevertheless, that's a small amount. It takes at least seven parts or eight parts of iron before you will notice color. In other words, you will get a tan color with at least seven parts of dissolved iron. Aluminum is still pretty high, indicating that there is probably some aluminum

chemical being used in the process, or it could come from aluminum equipment being used.

Q. What is that figure, Mr. Watts?

A. 41.8.

Q. Skip the next one.

A. Manganese is 0, chloride is 36. That would indicate there has been some chloride, chloride radical, say, aluminum chloride used in the process because the figure is up to 36 parts per million. There is some phosphate. Phosphate salt has probably been used. Maybe part of its use is in boiler water treatment which in a blowdown would be blown into the natural waste water discharging from a plant. The sulphate is very high, very unusual. That would indicate there is a sulphate radical, that sulphuric acid has been used somewhere in that process.

Q. What is that number, Mr. Watts?

A. 3,206 parts per million. The cyanide is 0. The total solids are 28,782, the volatile solids are 3,374 parts per million. Your fixed solids, 25,408 parts per million. Suspended solids are 110 parts per million.

Q. Mr. Watts, looking at Government's Exhibit No. 9, code No. 231–1, as an expert how would you characterize that sample?

A. Strictly an industrial waste.

Q. What is of particular significance among the results set forth on Government's Exhibit No. 9?

A. Well, the major one is the very high alkalinity of 8,200 parts, aluminum is unusually high, chloride, sulphate particularly, very high, and you end up with all that tremendous high amount of solids. It was all solids, total solids.

CROSS-EXAMINATION

By Mr. GONDELMAN:

Q. But some of those solids have been picked up if this sample were taken as this liquid moved over rocks or floated over rocks.

A. It is very doubtful. From day in and day out you are having the scouring effect on those rocks anyway, and whether your consultant would pick them up or I would pick them up, that is something we wouldn't argue. It is strictly an ordinary industrial waste being discharged that we would pick up.

Q. As I understand it, you found since there was 0.7 phosphate in the sample it indicated to you that there must have

been a discharge in the industrial process of some chemical containing phosphate. Is that right?

A. True.

Q. Because otherwise you would not find 0.7 phosphate in the sample which you examined?

A. That's right.

Q. Would you take a look at 511–1, sir. Is it not true, sir, that the midstream sample taken above the plant of the Defendant, where I think you testified before that it did not contain the matters discharged from the Defendant's plant, that the phosphate content of that sample was 0.8?

Mr. THORNBURGH. Your Honor, the Government hasn't charged any discharge of phosphates in this count. The question is irrelevant.

Mr. GONDELMAN. The Government deleted phosphates, but the witness testified about it on direct, and he also said that he would take it that the phosphates came from boiler water treatment.

The COURT. We are only concerned with the charge before the jury, and that does not include phosphates. However, if it serves any purpose as to the credibility of the witness, the expertise of the witness, you may ask it, if you are attacking Mr. Watts' credibility.

Mr. GONDELMAN. That question directly goes to credibility.

The COURT. I thought you had stipulated as to expertise, but I will let you go ahead and question his credibility, if you want.

Mr. GONDELMAN. But I didn't stipulate that everything he said was accurate.

The COURT. Of course not, and you may attack his credibility in any way you see fit.

By Mr. GONDELMAN:

Q. The question to you, sir, is whether or not the midstream sample, 511–1, shows phosphate 0.8. Is that correct?

A. Right.

Q. So that you are mistaken in your assumption that the 0.7 in 231–1 came from a chemical which was used then in an industrial process since there was more of the phosphate in midstream?

A. As I mentioned, phosphates are used in boiler treatment. You might have discharged some there, and as far as 0.8, I

don't know where it came from that we found in the river, and that was above your point of discharge to begin with.

Q. Right, that 0.8 was in the river above the point of discharge.

A. Right.

Q. And at the point of discharge it is 0.7.

Mr. THORNBURGH. Objection, Your Honor. That is not what the testimony was. It was what is in the discharge, not what was in the river at that point.

The COURT. We have an expert. I am sure he can clear that up.

(Preceding question was read.)

The COURT. You may answer.

A. I'm just giving you what I found in that particular sample and I don't consider it very important, considering the other high amounts of alkalinity, total solids and the other that I mentioned sulphates.

Q. In fact, you don't consider the iron very important either, do you?

A. In this case, no, not in this sample.

The COURT. Would .7 or .8 sulphate be found in natural water?

The WITNESS. Phosphate.

The COURT. Would either of the figures—

The WITNESS. There is a possibility because you not only have that coming from detergents, you have that coming from fertilizers, so it all depends on what time of the year you collect the sample. After a run-off, yes, the phosphates in the stream would be higher.

Q. And again, aluminum. Aluminum chloride or sulphate is used in the water treatment plants for the purification of water, is it not?

A. Correct.

Mr. GONDELMAN. I have no further questions.

A. But I stipulated also that you would not supply the ordinary citizen with treated potable water with 41.8 parts of aluminum for aesthetic reasons. You would have something floating around in there and the housewife would look at it and say, "Something is the matter with the water."

Q. I didn't say coming out of the tap. I said in the water treatment plant aluminum is used for the purification of water.

A. Oh, yes, it is used. So is ferric chloride used. So is phosphate used in treatment of water, treatment of boiler water.

REDIRECT EXAMINATION

By Mr. THORNBURGH:

Q. If you were called upon to assess a sample taken from a water purification plant and that sample analysis produced the results that are set forth on 231–1, which is Exhibit No. 9. what would your reaction be?

Mr. GONDELMAN. The question is objected to because there is nothing in the Refuse Act that says water has to be coming from a water treatment plant.

Mr. THORNBURGH. Mr. Gondelman has raised the possibility that this is the kind of water that comes out of a water purification plant.

Mr. GONDELMAN. That is not what Mr. Watts is saying. Mr. Watts is saying the chemical is used in the treatment of water.

The COURT. Let it go to the jury. Both of you can argue as you see fit.

A. Well, I certainly wouldn't approve of water containing 41.8 parts per million in a sample of tap water being furnished to the public.

Q. How about one that had total solids of 28,782?

A. Never. That is an impossibility for potable water to have that.

The COURT. How about normal water just without anybody dumping anything into it? Would you find that much?

The WITNESS. Never, Your Honor.

Q. What would you normally find?

A. Ordinary tap water or river water?

Q. River water.

A. It all depends upon the time of the season, the area that you are collecting the sample in. In a mine drainage area during the summer months when you don't have much of a run-off, you can go up to 500 parts per million total solids.

Q. That would be as high as it would go?

A. That's right.

Mr. THORNBURGH. I have no further questions on this exhibit.

RECROSS-EXAMINATION

By Mr. GONDELMAN:

Q. In light of those questions, Mr. Watts, you say that you would ordinarily find 500 parts of solids in ordinary river water. Is that correct?

A. At certain times of the year.

Q. Coming to your exhibit 231–1, in order to find what that discharge would do in a particular river like the Monongahela, you would have to know the rate of flow and the amount of gallons in the Monongahela River, would you not?

A. That's correct.

Q. So that the discharge of the solids that are shown on 231–1 into the Monongahela River, with its rate of flow and with the natural dispersion that would take place could well take that amount of solids down to the 500 that you have mentioned ordinarily would be found in river water, or do you know?

Mr. THORNBURGH. Objection. We are again into the quality of the river and it is not relevant.

The COURT. Sustained.

Mr. GONDELMAN. May we see Your Honor at side bar?

The COURT. No.

Mr. GONDELMAN. Your Honor asked a question that led to this line of questioning.

The COURT. You can object to my questions.

Mr. GONDELMAN. I can't object to your questions. You rule on it.

Do I understand I cannot find out what would happen to the discharge in the river to determine what the normal river solids would be?

The COURT. I am concerned, and the jury is concerned, with whether anybody was dumping solids into the river or industrial waste into the river. Whether they dumped enough to pollute the whole river isn't our question.

Mr. GONDELMAN. I have no further questions.

DIRECT EXAMINATION

By Mr. THORNBURGH:

Q. Next, Mr. Watts, I would like to refer you to what has been identified as Government's Exhibits Nos. 10 and 11.

Mr. THORNBURGH. I offer into evidence at this time Government's Exhibit No. 10, being the code sample identified as 230–2.

The COURT. That is count number what?

Mr. THORNBURGH. That is count number two.

The COURT. Any objection, Mr. Gondelman?

Mr. GONDELMAN. Same objection.

The COURT. No additional objection? The exhibit is admitted.

(Whereupon Government's Exhibit No. 10 was admitted into evidence.)

Mr. THORNBURGH. And also Government's Exhibit No. 11, which is identified as code No. 511–2. That is the midstream sample taken on August 19, 1970.

Mr. GONDELMAN. Same objection.

The COURT. It is admitted.

(Whereupon Government's Exhibit No. 11 was admitted into evidence.)

Q. Let's get our signals straight here, Mr. Watts. I am referring to Government's Exhibit No. 10, the sample designated as 230–2, page fifty-three of your report. Government's Exhibit 511–2 is on page fifty-four of your report.

A. Right.

Q. Let's look at 511–2, which is Government's Exhibit No. 11, being the midstream sample taken on August 19, 1970. I wonder if you would just review for the jury those findings and your analysis with respect to that one.

A. On 511–2 you will notice that the pH range is 5.6. That is in the acid range. We are assuming that we have some acidity in there. The alkalinity only amounts to 4 parts per million. You come down to total acidity, down to the iron, aluminum salts which hydrolyze there and gives you 12 parts per million, so your alkaline reserve there is only 4 and you have 12 of acid. Hardness is 180 parts per million. There is no iron, 0. Aluminum is 4.8 due to those hydrolyzable salts of aluminum. Manganese is 1.0, a good indication that there is mine drainage in there. Chloride is 8 parts per million. That is low. Phosphate is one-tenth of a part per million. Sulphate is 258.4 parts per million. There is no cyanide. The total solids is 404 parts per million. The volatile solids, 87, and fixed solids, 317 parts per million.

Q. Mr. Watts, I wonder if I could ask you just for a moment to step down from the stand. Displayed in front of the jury side by side are Government's Exhibits No. 8 and No. 11, being the two midstream samples. I wonder if you would examine those two midstream samples and let me ask you some questions about that. Would you, in your expert opinion, character-

ize each of those as—how would you characterize them? Are they typical or atypical water samples?

A. Comparing the two, the one has a pH of 5.6 and the other one a pH of 6.4. This would indicate to me that in this sample here we have got an unusual flow of mine drainage from some area where you have run-off. If it is on the Monongahela, it comes down from the Maryland mining area or West Virginia. To prove that you have to go down to, say, Point Marion and check a river that is one of the tributaries that is flowing into the Monongahela to see which one it is and you would probably pick that up, and the difference is the pH since the pH is lower here and a little higher there. You'll notice as the pH drops your alkalinity goes, so if I have a pH of 4.4 I would have no alkalinity. There would be zero alkalinity in the stream. In other words, that is not very good for a body of water to have 0 alkalinity. I mentioned in the one where we had a pH of 5.6 and an alkalinity of 4, compare that with a pH of 6.4—

Q. On the midstream samples only we are talking about.

A. These two here. You will notice I didn't list any bicarbonate alkalinity which we would normally find for the simple reason we are getting total acidity. It seems odd to a person that you can have alkalinity and acidity at the same time. The pH governs that. We know there is no free mineral acid in the pH because your pH would be 4.4 or less, but this pH dropping in both cases indicates that we have some hydrolyzable solids that has a tendency, when it is dissolved in the water, to turn it slightly on the acid side, so your pH will drop there. The hardness is 180 against 164. You will notice that the hardness is increased here for the simple reason that you have an acid condition of water that is flowing over the rocks dissolving the shale, the limestone and so on, picking up the calcium and magnesium that increases the hardness. Notice the pH is 5.6. There you have 180. Here it is 6.4 and you have 164. The total iron is 0 here and .1 here. You have a little more aluminum here, 4.8. That is 1.1. We don't have any fluorides here, but you will notice as your water is more acid you will have more fluorides in the water.

Q. There is no fluoride? You didn't find any fluoride?

A. No, but I just mentioned that. The solvent action of the water on an acid side gives you an idea of the amount that can be dissolved. There is 1 part manganese. That indicates mine drainage. You will find a lot of manganese in mine drainage. In here we only get three-tenths of a part, so this indicates that

we have gotten some mine drainage coming in on that particular day when that sample was taken. You have chloride of 8 there and chloride of 8 there. That's low, normal for ordinary stream water. Phosphate, one-tenth against eight-tenths. There is a strong possibility that some of this phosphate, because of the low pH, would combine with some of the calcium and magnesium that is combined with the water. Therefore you would have a precipitate of calcium phosphate that would settle out. Sulphate, 258 against 267. You will notice that this is a little higher here than it is here. There is a strong possibility that some of this, with incoming alkaline water, could have been settled out, precipitated out, as calcium sulphate or gypsum, so you see the difference in those two. We checked for cyanide. We didn't find any. The reason we check for it, these are all code number samples and we had no idea by the color, appearance of that—we didn't want to miss anything so we ran a check for cyanide in that case. The total solids, 404 against 348. Volatile solids, 87 against 112. This little higher amount could indicate that we have got some organic, possible organic matter. It is a little higher than this one. The fixed solids, 317 to 236, indicating because of this condition there is more dissolved solids. Calcium, magnesium and so on have been dissolved by the water.

Q. A midstream samples of the river, based on your knowledge of that river and your experience in running water analyses, how would you characterize those samples, the one taken August 7 and the one taken August 19?

A. Well, for the different seasons of the year, I would say that that's not abnormally high. That's a normal flow of water. If it should drop, say, a very high flow, a very high discharge, mine drainage, so on, yes, this could drop. I remember thirty, forty years ago both streams here——

Mr. GONDELMAN. Your Honor, let's stay a little closer to the subject.

Q. Mr. Watts, you might as well stay there. Would you take a look at what has been marked for identification purposes, I believe, as Government's Exhibit No. 10.

A. 230–2.

Q. No. 10, 230–2, which is the sample taken from the discharge point identified as No. 230 on August 19, 1970, and review the findings of your sample analysis there and give us the benefit of your observations on it.

A. Well, starting with pH, you have a pH of 4.4. We know we have no alkalinity, as you see here. We have 0 alkalinity. With

that pH of 4.4, if we have 0 alkalinity, we are going to look not so much for 0 acidity. Due to iron, aluminum salts we have it listed as so, 360 parts per million. Hardness is 168 parts. The total iron, 1.2 parts. Here we come to aluminum, 98.4 parts. That is very high. Manganese is 0.8 parts per million. Chloride is 132. That's unusually high. You wouldn't find that in a stream unless it was contaminated. Phosphate, two-tenths of a part per million. Sulphate, 270 parts per million. Cyanide, 0. The solids are very high, 1,068. I mentioned previously in an ordinary stream during a dry spell you would be fortunate if you had 500 parts per million. Volatile solids, 417, with that volatile indicating some organic combustible matter there more so than inorganic chemicals. The fixed solids, 651. Suspended solids are very low, 15 parts.

Q. Based on your review of that sample analysis there, how would you characterize that discharge?

A. I would call that an industrial waste discharge.

Q. What are the particular road signs that you have there that gives you a clue as to what might be happening?

A. My first clue is a pH of 4.4. Then you have total acidity, 360 parts per million. My next clue would be high aluminum, 98 parts. Here is the next one, 132, chlorides. Sulphates, I don't consider that. In this case the chlorides indicate there could have been a possible use of hydrochloric acid in the process there somewhere. The total solids are unusually high.

Mr. THORNBURGH. Cross-examine.

CROSS-EXAMINATION

By Mr. GONDELMAN:

Q. What you are saying, sir, as to 230–2 is that the iron and the sulphates are within normal limits, are they not?

A. According to that sample there, yes. I wasn't concerned with those two as I was with the others that I mentioned there.

Q. Are the phosphates within normal limits?

A. Yes.

Q. As a matter of fact, in the river itself it was 0.1 in one case and in the one taken out of the sample it was 0.2, so in that one sample it is one point higher than the sample from the river without anything being added by the Defendant.

A. There is a possibility you weren't blowing down from the boiler treatment when the sample was collected.

Q. The other sample that you have from the other day, 231–1, was something like 0.7, was it not?

A. Yes.

Q. And in the sample taken two weeks later it was 0.2.

A. As I mentioned before, you were probably using the phosphate in boiler treatment. One day you were blowing down and we got 0.7. This time you weren't blowing down. It just so happened that we just got a trace of phosphate.

Q. If the water which is taken into the Defendant's plant came from the river sample which you testified came from mid-stream above the plant, then that river water would have contained on your exhibits in one case 0.1. That is 511–2. It only had 0.1 phosphate. Is that correct?

A. Right.

Q. And that would be the one which, at 230–2, the date of that sample then comes out at 0.2 phosphate, does it not?

A. Right.

Q. And on the date that 511–1 was taken you have 0.8, and the exhibit not up there, 231–1, came out as 0.7. Is that right?

A. There is a possibility that any of your solids may combine with a phosphate. You can have calcium and magnesium combine with a phosphate and come out as a precipitate in your total solids.

Q. Anything can happen.

A. Right.

Q. As far as you can testify as an expert as to what did happen, we know that at the point of discharge, 230–2, it comes out at 0.2, and the stream itself before the water went into the Defendant's plant was 0.1.

A. I consider that as a minor pollutant, if any. My consideration in this case is a very low pH, no alkalinity, total acidity due to the low pH, high aluminum, high chlorides, high total solids.

Q. So you don't consider the phosphates anything or the sulphates anything?

A. In this case, no. If the sulphates were in the 2,700 area, I'd say yes.

Q. But they aren't. They are 270——

A. But in this case, no.

Q. And in this case and from the exhibit from which you are testifying, your testimony as an expert is that it gave you no concern. Is that right?

A. In this case, no.

Q. Just on that exhibit, as to sulphates, you did not consider that a matter of concern. You figured it was really normal in that river water, did you not?

A. Normal in this sample. There was nothing unusual in the sample as far as sulphates are concerned. As I mentioned before, if the sulphates would have been up in the 2,200——

Q. Then we wouldn't be talking about Exhibit 9 or Exhibit 10. We would be talking about something else. Let's try to stick to that exhibit if we can, sir.

A. All right.

Q. You then come down to suspended solids, 15.0. Is that correct?

A. Right, 15 parts per million.

Q. That's 15 parts of solids per million. Would you say, sir, that the sample which you got and tested at 230–2 was in a liquid state?

A. We considered it as a liquid state, yes. We consider syrup as a liquid state, too.

Q. My question again to you is, is the sample which you received and which you have examined, 230–2—I'm not interested in syrup or waffles. I am interested in 230–2. You got that in a bottle, did you not?

A. Right, as a liquid.

Q. Then it was in a liquid state.

A. Right, with a little suspended matter in there of 15 parts per million.

Q. And that would not make it a solid?

A. Correct.

Q. So it would still be in a liquid state.

A. That's right.

Q. That's all I asked you. The iron was no problem, was it?

Mr. Thornburgh. Your Honor, I object to that kind of a question. I don't know what Mr. Gondelman means.

Q. You didn't consider it high, though? What did you——

A. No. As I mentioned previously, when I got this sample we made the analysis from an industrial waste point of view. When I get a pH of 4.4 I don't have to run anything else. I will say that is an industrial waste that you are dumping into the waters of the Commonwealth.

Q. Well, sir, the Defendant has been charged with dumping iron, in that sample, into the river. You are the expert, so my question now to you is limited to iron and I would like to find

out from you if you can answer specifically without going over the whole exhibit. I am directing you to what is shown on your exhibit as iron, total Fe, 1.2. As to that finding in your test, is that iron unusual, an unusual discharge in the Monongahela River?

Mr. THORNBURGH. Objection, Your Honor. It has no relevancy.

The COURT. That's right. Sustained. Rephrase your question.

Q. Are you concerned about the amount of iron you found in the sample?

Mr. THORNBURGH. Objection; same grounds.

The COURT. Well, what we want to know is whether 1.2 parts would be considered refuse as to iron. Isn't that what we are asking for?

The WITNESS. In other words, that would be 1.2 pounds in a million pounds of water.

The COURT. Is that a significant amount?

The WITNESS. That's very insignificant. I'm concerned here with the type of water, the volume of the water at that pH, the acid condition.

The COURT. But in Mr. Gondelman's cross-examination he doesn't want to ask you about that.

Q. And if I ask you the same question as the Judge just asked you as to manganese, would your answer be the same?

Mr. THORNBURGH. That's irrelevant. We don't charge a discharge of manganese in this count.

Mr. GONDELMAN. You deleted that the same as you did the iron after the case was in trial.

Mr. THORNBURGH. I ask that that be stricken.

The COURT. Well, whether something was deleted or wasn't deleted, we are only concerned with what is still there, so don't speculate as to why it was deleted. It isn't there.

Q. Your answer would be the same as to the sulphates, wouldn't it?

A. It is a low amount. The manganese, we don't like it because even a half a part, even in the treatment of water, in the end you will have black spots on your white linen and so on.

Q. I agreed to withdraw my question as to manganese. I was talking now about sulphate, SO4,270.

A. The 270, we are not concerned with that amount.

Q. Especially when the river itself is 258 and 267 on the other two exhibits.

A. That's pretty close.

Q. When you are talking about that part, in how many millions of gallons of water is that?

A. That is 270 pounds in a million pounds, or if you want to get it in million gallons of water——

Q. Let's just take it there. 270 pounds of sulphate in how much water?

A. In one million pounds of water.

Q. So that in the river upstream it is 258 pounds of sulphate in one million pounds of water?

A. Right.

Q. You are talking about a difference of roughly 14 pounds in a million pounds of water. That's why you don't find it significant?

A. Well, no. I wasn't concerned to find it significant when I get that figure and I get this figure.

Q. Mr. Watts, I can't keep trying your whole exhibit. I would like, if you could—please, I'm trying to direct your attention to one finding on your exhibit.

A. All right. I said 270 wasn't significant when you compare it with what's in the river.

Q. Would you find suspended solids in the amount of 15 pounds per million a significant amount of solids?

A. No, I wouldn't find it significant.

Mr. GONDELMAN. I have no further questions.

REDIRECT EXAMINATION

By Mr. THORNBURGH:

Q. Mr. Watts, I want to redirect your attention to Government's Exhibit No. 7, being the code No. 230–1. You have testified on cross-examination with respect to the comparison between those two. Now, 230–1 and 230–2 have already been identified as having been taken from the same source of discharge. What would the fact that the pH was alkaline on 230–1, 8.8, and acidic on 230–2, 4.4, indicate to you as to the type of discharge?

A. Well, in this case, being a low pH, I have got some aluminum salts in there that would drop that pH. I have some chloride which could be some hydrochloric acid there.

Q. Maybe you don't understand my question. Let me put it this way. Is there a difference, in your expert opinion, between the type of discharge that was made on August 7 from this

source, No. 230, and the type of discharge that was made on August 19 from No. 230?

A. Well, in this case here you have a caustic range of discharge.

The COURT. Would you refer to them by exhibit because we won't be able to understand that later.

A. Exhibit No. 7 has a pH of 8.8 and Exhibit No. 10 has a pH of 4.4.

Q. Let me ask you if you will translate that into terms that I and the jury will understand.

A. Yes.

Q. What is that difference?

A. The difference there is that by looking at the pH's in the one case you have an acid range and in the other case you have a caustic range, so evidently in this caustic range there must have been some use of some caustic material such as soda ash, sodium hydroxide. That's on the caustic, the lye side, and would raise this pH.

Q. Would that same kind of caustic material have been included in 230–2, Exhibit 10?

A. It is very doubtful because you have a pH of 4.4 which indicates there is some acidic material instead of alkalitic material.

Q. Are these two discharges from the same spot taken on different dates similar or dissimilar?

A. Dissimilar.

Q. They are dissimilar?

A. Right. They are industrial wastes.

The COURT. Anything further, Mr. Gondelman?

Mr. GONDELMAN. I don't think so.

(Short recess)

Mr. THORNBURGH. I would move the introduction into evidence of Government Exhibit 12, being code No. 231–2, a sample taken from the outfall identified as No. 231 on August 19, 1970.

Mr. GONDELMAN. Same objection.

The COURT. Same ruling. Admitted.

(Whereupon Government Exhibit No. 12 was admitted into evidence.)

The COURT. This concerns, I assume, count four?

Mr. THORNBURGH. This is count four, the final of the four counts, yes.

Q. Referring to Government's Exhibit No. 12, Mr. Watts,

I wonder if you would go through the results of your sample analysis in the same manner as you have the three previous and give the Court and jury the benefit of your analysis.

The COURT. Without repeating conclusions you have already given. You know what I mean.

A. Sample No. 231–2 has a pH of 10, on the caustic range, very high. The alkalinity is 16,000 parts per million, very high. That pH would mean no total acidity. The hardness is 0, iron is 2.2. The aluminum is high again, 83.6. The manganese is 0. Chlorides, 540, high. Phosphate, 10.5, high. Sulphate, 9,768 parts per million, very high. Cyanide, 0. Total solids 46,832 parts per million. Volatile solids, 7,337 parts per million. Fixed solids, 39,495 parts per million, very high. Suspended solids, 320 parts per million, very high.

Q. How would you characterize that?

A. I consider that an industrial waste discharge.

Q. What kinds of clues do you have as to the nature of that?

A. A pH of 10, alkalinity, 16,000.

Q. Let me interrupt you for a minute, Mr. Watts. In each case you have referred to the pH and the alkalinity. They don't indicate the presence or absence of any particular substance, do they?

A. No, except it gives me an idea that this—the pH with that high range of 10 is on the caustic side. It must have some caustic material in there, caustic material of some nature, and this bears out with the high alkalinity of 16,000.

Q. Were there any other clues there that you would want to refer to specifically?

A. Yes. We are back again to high aluminum 83.6. We are high in chlorides, 540. We are high in phosphates in this case. We are high in sulphates. We are high in solids. We are high in suspended solids.

Mr. THORNBURGH. Cross-examine.

The COURT. Mr. Gondelman, if you misunderstood one of my prior rulings, you may certainly ask any question that you want to ask concerning characteristics of water if this Defendant took the water from the river and used it and then it came back out. To that extent you may certainly question as to the test above stream. What we are not concerned with is whether the river itself might have contained substances which are in themselves pollution or industrial waste. What we are concerned with is what was put into it.

CROSS-EXAMINATION

By Mr. GONDELMAN:

Q. Mr. Watts, just getting quickly down to those suspended solids, you are talking there about solids which remain after all other tests are run and everything else really, in effect, is dissipated. Is that correct?

A. Did you say total solids or suspended solids?

Q. Suspended solids.

A. They are taken out of the sample before we run the total solids.

Q. All right, and the volatile solids and the fixed solids are either in suspension or in solution, are they not?

A. Total solids? I may have some of those suspended in the total solids. This is 320, so I have that in there.

Q. Then your total solids?

A. Total solids means everything that is in solution plus the suspension.

Q. When you are talking about "in solution," you are talking about aluminum salt like aluminum chloride, which again, like salt, is dissolved into the water?

A. Right.

Q. In other words, if you take salt and put it in tea and it is dissolved in there, you would say that that salt is a solid in water. Is that correct?

A. Well, it is dissolved in the water. It is a solid that you put in that's dissolved in the water.

Q. If you analyze that tea with sugar dissolved in it, you would have a total solid figure if I gave you that glass of tea to analyze?

A. Right.

Q. As to the suspended solids, these are matters which may settle out of the liquid which are not truly in solution?

A. Correct.

Q. Then am I correct that the 320 pounds per million gallons, that's what that figure shows, does it not?

A. That's part of the 46,832, the 320.

Q. The 320 figure on the exhibit is indicative of 320 pounds of suspended solids as that would relate to one million pounds of water?

A. Right.

Q. And the others are actually in some sort of solution. The others are not suspended, they are in solution.

A. Right.

Q. And the figures you have at 231–2 cannot properly be compared, can they, to the figures shown at 511–1 because you do not have a water rate of flow that would be applicable to 511–1 or 2, whatever that other exhibit is.

Mr. THORNBURGH. Objection, Your Honor, on the same grounds previously mentioned.

(Preceding question was read)

The COURT. I am going to sustain the objection. I want to explain to the jury why.

We are concerned with a statute that makes it unlawful to throw refuse into a navigable stream. We will define those terms to you later. Whether there is already similar content in the stream doesn't make any difference. Let me give you an example which is not applicable, of course, to the particular case. If there is a statute saying that you cannot throw rubbish on the street, it is no relevant matter to say that there is already more rubbish on the street or that this new rubbish won't really make it very dirty because there is already so much there. Nor are we concerned with whether the wind is going to carry some of it away. The statute says that you can't throw rubbish in the street and that's it. That's what we are concerned with here. This is why I am not allowing any evidence in comparing or stating the effect on the river of any refuse thrown into it.

Mr. GONDELMAN. In that case I would ask that Your Honor withdraw from the consideration of the jury and strike all evidence relating to 511–1 and 511–2 because that is exactly what the witness is doing. He is comparing 511–1 and 2 with the samples. I must know what the basis of that comparison is.

The COURT. Do you really want 511 withdrawn from the consideration of the jury?

Mr. GONDELMAN. 511–1 and 2 if it is a basis of comparison, which I think is being shown here.

The COURT. It is not being shown as a basis of comparison at all, but if you want it withdrawn, I will give careful consideration to that.

By Mr. GONDELMAN:

Q. Mr. Watts, what was the purpose of 511–1 and 511–2?

Mr. THORNBURGH. Objection, Your Honor. The witness didn't take 511–1 or 2.

The COURT. You can ask him what use he made of them.

Q. What use did you make of 511–1 and 2?

A. Merely as a record to have on file to see what the condition of the stream is. I have other records, too, that have no connection here. It is just a matter of having a record of what the conditions are of the stream, but I made no comparison. I didn't go ahead and hold this sample here against this sample and run an analysis.

The COURT. Let me ask a question there. The 511 series has nothing to do with what was in the effluent from the pipes. Is that correct?

The WITNESS. Correct, correct.

Mr. THORNBURGH. Your Honor, this witness has already testified that he didn't know what any of these were when they were delivered.

The COURT. That's right, but now, today, 511 as you have testified to it, has nothing to do with any effluent?

The WITNESS. That's right.

The COURT. Do you want them withdrawn? If you want them withdrawn, I am going to do it.

Mr. GONDELMAN. No, Your Honor. Leave it the way it is.

Q. As to 230–1, 231–1, 230–2 and 231–2, those figures have no relationship to 511–1 and 511–2. Is that correct?

A. That's right. I made no comparison between the river samples and your samples.

Q. In fact, you couldn't make any comparison between those two.

A. No. Those are the analyses and they have nothing to do as far as the analyses of the river.

Q. The jury should not try to compare these two because they are not comparable, are they?

A. That's right.

The COURT. That's correct, and that's the way I ruled, that they are are not comparable and must not be compared.

Mr. GONDELMAN. I have no further questions.

REDIRECT EXAMINATION

By Mr. THORNBURGH:

Q. When you received these samples, 230–1, 230–2, 231–1, 231–2, 511–1 and 511–2, was there any other identifying matter that came along with them saying, for instance, that they were connected with any particular discharge?

A. Absolutely not.

Q. As far as you know, each one of these was a sample taken from——

A. Correct. Whether it was 511, whether it was collected from the river or where it was collected I had no idea. I had code numbers. That's all.

Q. And until after you completed your total analyses you didn't know where any of this came from?

A. That's correct.

Mr. THORNBURGH. I don't have any further questions of Mr. Watts at this time.

RECROSS-EXAMINATION

By Mr. GONDELMAN:

Q. Mr. Watts, do you know whether a detergent like Tide, if found in a solution such as was given to you, would result in your finding fairly similar results to those that are shown on your chart as taken from PICCO?

A. Not necessarily.

Mr. THORNBURGH. We are talking about four different solutions here, samples, which vary greatly.

Q. If it doesn't apply to all four, okay. If it applies to one, all right, any way you want it.

A. Say I had a sample of Tide. I wouldn't have the great alkalinity I have there, high alkalinity. I would have a very high phosphate content.

The COURT. I wonder if we couldn't get just a yes or no answer. I think the question is, if Tide was thrown in there would it give you the same results as you found in these four samples?

The WITNESS. How much of it?

Q. You tell me how much you would need. You are the expert. How much would you need to get a sample similar in any way to any of the four samples you have shown?

A. In the first place, in the sample of 4.4 you would probably need a truckload of Tide to bring that up so that you could use it as a detergent and the one up at 10, you would be adding some more Tide to it and I don't think you would want to use—being Tide would have a high pH you would be increasing that pH to about 12 or 13.

The COURT. I think you have misconstrued the question. There has been some testimony that there were houses that might have discharged their wastes into some of these pipes.

We don't know whether or not they did yet. What we want to know is, if those houses would have used Tide, could that be the cause of the condition you have analyzed rather than the industrial use?

The WITNESS. Never, never.

Q. Not at all?

A. Never.

Q. From your testimony it would be impossible to take Tide in solution and arrive at substantially the same type of results you have on any of your four exhibits?

A. I would say so, yes.

Q. And if I asked you the same question about coffee, of course, your answer would be the same. You couldn't have coffee discharged into water that would give you the results on any of the four exhibits that you have testified to?

A. It's true.

Mr. GONDELMAN. I have no further questions.

Mr. THORNBURGH. You are excused.

Mr. GONDELMAN. I would like an offer of proof for this witness.

[Side bar conference.]

Mr. THORNBURGH. Mr. Lisanti's testimony is offered to prove the nature of the source of the discharges identified as 230 and 231. He also is offered to indicate the type of operation carried on by Pennsylvania Industrial Chemical Corporation in terms of what types of chemicals are used as a means of closing the gap which presently exists between the actual discharge and what the process was that produced it. He also is offered to corroborate Mr. Watts' samples with respect to 231–2 because at approximately 3:00 p.m. on August 19, 1970, he took similar samples and performed similar tests, getting similar results, and it would tend to corroborate, although I am not—if we have no problem on it, it doesn't need to be corroborated.

Mr. GONDELMAN. I would like Mr. Thornburgh to corroborate because as wide as he goes, that's how wide my cross-examination goes.

Mr. THORNBURGH. He is called for a very limited purpose. I anticipate possibly having to ask the Court to call Mr. Lisanti as for cross-examination by reason of the fact that I was informed by Mr. Gondelman that he represents Mr. Lisanti personally as counsel and he has prohibited me from discussing any of his testimony with him prior to his——

The COURT. If he becomes adverse—

Mr. GONDELMAN. If the Court please, Mr. Lisanti does not work for my client PICCO. He was engaged as our expert.

The COURT. Did you instruct him not to discuss his testimoney with Mr. Thornburgh?

Mr. GONDELMAN. I instructed him not to discuss it with Mr. Thornburgh. That does not make him adverse.

The COURT. If he does become adverse you can call him as for cross-examination.

Mr. THORNBURGH. Hostile is what I mean.

[Anthony Frank Lisanti, a witness called in behalf of the Plaintiff, having been duly sworn, testified as follows:]

DIRECT EXAMINATION

By Mr. THORNBURGH:

Q. Your full name for the record.

A. Anthony Frank Lisanti.

Q. Mr. Lisanti, I am going to ask you a series of questions. I want you to listen very carefully to the questions and answer only the questions that I ask you so that the jurors can have the benefit of the testimony you are giving. What is your occupation?

A. I am a professional engineer, consulting engineer.

Q. Are you familiar with the processes carried on by Pennsylvania Industrial Chemical Corporation at their plant in the Borough of Jefferson, Allegheny County, Pennsylvania?

A. As related to their waste discharges——

Q. Are you familiar with them? Yes or no?

A. I have a familiarity, yes.

Q. What processes are carried on by Pennsylvania Industrial Chemical Corporation at their plant in Jefferson Borough, Allegheny County, Pennsylvania?

A. That's where I have some difficulty because I don't know all the manufacturing processes.

Q. Do you know what they make?

A. Yes.

Q. What do they make?

A. They use solvents and petroleum by-products for the manufacture of polymers and a number of products which are used in other industries.

Q. Do they make organic resins?

A. Yes, they use them and make them.

Q. Are those resins based upon styrene, endene and other hydrocarbons?

A. Yes.

The COURT. How does this witness know these things? I would like to know before you tell us what they make, how do you know what they make?

The WITNESS. Our firm, which is the Chester Engineers, Coraopolis, is a firm which deals primarily in industrial waste and water treatment. We were retained by Pennsylvania Industrial Chemical Corporation in June of 1970 to make a complete survey and analysis of all their waste discharges and to develop for them an abatement schedule and pollution abatement plan which we have done. As part of that we obviously assigned a number of engineers, a number of chemists to determine exactly what is going on in the plant and to determine exactly what was the nature of the discharge and what had to be done with the discharge to bring it into compliance with state and Federal regulations. That was my task. In order to accomplish the task I had to have some knowledge of what was going on in the plant.

The COURT. All right. I know how you know.

I have never seen this gentleman before and neither did the jury, so we had to know how he knew what he was talking about.

By Mr. THORNBURGH:

Q. Mr. Lisanti, do you know the chemical usages of that plant in Jefferson Borough?

A. Yes, sir. I think it is stated in my report.

Q. Can you tell the jury?

A. Yes, I can, but if you give me the report—yes, I have it in front of me.

Q. Would you tell the Court and jury what those usages are.

A. Soda ash—these are approximately—a million pounds a year; caustic soda, a million pounds a year; sulphuric acid, 500,000 pounds a year; aluminum chlorida, salt, a total of about 8,000 pounds a day; barium trifluoride, about a ton a day, 2,000 pounds a day.

Q. Is that boron trifluoride?

A. Boron. I'm sorry.

Q. I show you what is marked as Government's Exhibit No. 1 and refer you particularly to the red circled area. Are you familiar with that source of discharge?

A. Yes. That's a 24 inch concrete pipe.

Q. With respect to Government's Exihibit No. 5, again I refer you to the circled portion there.

A. It's hard to tell, but I think that is that small 5 inch pipe.

Q. And Government's Exhibit No. 6——

A. Yes.

Mr. THORNBURGH. Let the record indicate that I have spread before Mr. Lisanti Government's Exhibits 1 through 6 for his reference during the questioning.

Q. Mr. Lisanti, referring to Government's Exhibit No. 1, which has been identified in this court as outfall No. 230. Did you become familiar with that source of discharge in the course of your examination?

A. Yes, sir.

Q. Did you identify it in any way?

A. Well, I don't recall; probably outfall No. 1, which is a 24 inch pipe.

Q. Did you refer in your report to a discharge of waste from A-poly and from B-poly?

A. Yes, sir.

Q. Which of those would that have been?

A. I'm getting my reports so I can start here. That would be A-poly.

Q. In the other exhibit which has been identified here as discharge No. 231, that would be, in your terminology, B-poly?

A. Yes. That reflects what is tributary to this source.

Q. To use your language, A-poly waste discharge—

The COURT. What is poly?

The WITNESS. It is just a short term for polymer.

The COURT. But I don't know what a polymer is either.

The WITNESS. I am going to have great difficulty telling you that.

The COURT. What is A-polymer or B-polymer? What are we talking about?

The WITNESS. We are talking about different organic compounds that are manufactured.

By Mr. THORNBURGH:

Q. Looking at that first one, No. 230, and your designation of A-poly, are you familiar with the source of the discharge that comes out from that?

A. I would say source of it, yes.

Q. What are those sources?

A. Shall we start at the top of the sewer. As I said, it is a combined sewer. There is drainage from the municipality there, a number of homes that discharge into that combined sewer. There is storm run-off. It then enters the PICCO properties. There is river water into that sewer and there are various manufacturing process discharges into that sewer, all of which are tributary to A-poly.

Q. Do you know what the various manufacturing discharges are?

A. They represent exactly 60 gallons a minute on the average of manufacturing waste.

Q. Qualitatively, what are they? What process do they come from? I refer you to page one of your report.

A. Well, it comes from the manufacturing of a polymer which uses a number of catalysts such as aluminum chloride to manufacture that process, so you have a by-product from the process and this represents a by-product from that process.

Q. The waste from that process is then dumped into the pipe that eventually becomes the A-poly?

A. It does go through a treatment facility first.

Q. After the treatment facility it goes into the pipe?

A. It is discharged into the pipe.

Q. With respect to the B-poly, that's what we have identified here as No. 231.

A. Well, again it is a manufacturing process of a polymer which uses a boron trifluoride catalyst and it goes through a fairly extensive treatment process, the by-product, and is then discharged through this little 6 inch, I guess it is, steel pipe.

Q. Is there any domestic discharge, any of the type of thing that you said was in the A-poly effluent, prior to the dumping of the manufacturing process, in the B-poly one?

A. No.

Q. That's strictly an in-plant discharge?

A. Yes, it is. That's correct, to the best of my knowledge.

Q. What is discharged out of that comes directly from the manufacturing operations, the manufacturing of the resins in the Pennsylvania Industrial Chemical Corporation plant?

A. After it passes through a treatment process, yes, sir.

Q. Referring to page two of your report, the second paragraph, the second sentence.

A. Yes, sir.

Q. What is the makeup of the waste after treatment as it goes into these two discharge pipes?

A. After treatment?

Q. Yes.

A. I think you will have to refer—this describes the waste as discharged by the manufacturing process which contains oil, resins and solvents and so forth. It then goes through——

Q. What else? You said, "and so forth." Oil, resins?

A. Solvents and inorganic catalysts such as aluminum chloride, so forth, and boron trifluoride, but that is what is being discharged. You asked me what is coming out of the pipe, and that's, of course, something quite different.

Q. I asked you what was being discharged from the manufacturing process.

A. This is being discharged from the manufacturing process to a treatment plant.

Mr. THORNBURGH. I have no further questions of Mr. Lisanti.

CROSS-EXAMINATION

By Mr. GONDELMAN:

Q. Let's pick up right there, Mr. Lisanti. Mr. Thornburgh asked you, in referring to your report, what was discharged from the manufacturing process. As I understand it, that is not what is being discharged into the Monongahela River. Is that correct?

A. No, sir.

Q. Let's find out where it goes. Where does it come from, the point at which Mr. Thornburgh left you?

A. We'll take each stream. B-poly goes through a series, if I trust my memory—I could pull out a sheet—but B-poly goes through a series of three oil break tanks where all the insoluble oil is removed. The insoluble oil is removed, taken to another tank and then hauled away or burned in the process. After that the waste, the pH is adjusted to neutralize the alkalinity if it is caustic, to bring it up, and then it goes through another settling tank, an air floatation tank which, in effect, imparts a great deal of little bubbles to it which is what causes any small amounts of oil to rise to the surface and be skimmed off, and that discharge which represents about six gallons a minute goes into the Monongahela River. Our tests show that that facility was very effective in removing oil and solvents. Our tests showed, in fact, it was 98–99 per cent effective. Back over to the A-poly, that goes through a series of settling tanks and

at the present time it goes through a small carbon absorption unit.

The COURT. This is back in August of 1970?

A. Yes. At the time we were there is was going through a small carbon absorption unit. That unit was placed by PICCO. We studied the effect of that so we could develop a total project for them.

Q. You started doing the total project and were engaged by PICCO, the Defendant, in June of 1970. Is that correct?

A. Yes, that's right.

(Defendant's Exhibit A was marked for purposes of identification)

Q. I show you, Mr. Lisanti, what has been marked Defendant's Exhibit A and ask you, with specific reference to anything that you see on the Government exhibits, if you can identify any of the parts of those on Defendant's Exhibit A. Tell us what it is.

A. Yes. This is the sewer pipe for the outfall which has been identified as Exhibit 3 and Exhibit 1.

Q. That is the 24-inch pipe line?

A. Yes, sir.

Q. Could you tell us in the upper left-hand corner, can you tell us what that is?

A. Well, we can start from the beginning of the pipe. The pipe picks up a 10-inch concrete sewer. There are two diversion structures there which pick up the flow and the drainage from, well, so-called Madison Avenue and Second Street in that little development there.

Q. When you say "development," what kind of development?

A. Well, there are——

Q. Residential?

A. Yes, residential.

Q. There are houses up there?

A. Houses.

The COURT. How many?

The WITNESS. I quite frankly do not know.

The COURT. Approximately?

The WITNESS. Tributary of this sewer, maybe twenty. It would be a guess.

The pipe then continues down, comes down into what is PICCO property where it picks up a number of streets—which are PICCO streets—drainage and it goes down in a 12-inch line

which carries river water discharges into there and the treatment plant of A-poly also discharges into this 24-inch sewer and it is carried on into the river.

By Mr. GONDELMAN:

Q. You say there is a pipe which carries river water?

A. Yes, sir.

Q. Would you tell us where that water comes from, if anything is done to it, and how it gets into this 24-inch sewer?

A. PICCO maintains a river pump station. They at one time used river water, to the best of my knowledge, in their plant. They have abandoned a good portion of that use, but they still use it in this end of the plant primarily for cooling or to keep this sewer flowing free. In other words, no product comes in contact with this specific river water.

Q. In other words, there is river water that flows into that sewer which has no chemicals in it and is used in no manufacturing process but in cooling and to keep the sewer clean?

A. Yes.

Q. The river water we are talking about going through there is the Monongahela River, water of the Monongahela River?

A. Yes, sir.

Q. Insofar as the smaller pipe, that's a sewer, too, is it not?

A. Yes.

Q. That's a little 6 inch pipe which is used to bring various flows from various buildings on the PICCO plant into a pipe which is a sewer which discharges into the Monongahela River. Is that correct?

A. Well, not——

The COURT. Why don't you ask him a question?

Mr. THORNBURGH. I was going to object. This is cross-examination, but the situation is somewhat unusual. I would rather have the witness testify.

The COURT. I would rather you ask him what it does.

Q. You tell us what happens to it.

A. There are a number of sewers, various sizes, some 6, some 8 inch, which collect the by-product wastes from B-poly. They discharge to the treatment process which I previously described and after the treatment process it then goes through this 6 inch pipe. These exhibits show what we placed in there to measure the flow. Then they go on out into the stream.

Q. So if I understand you correctly, the 6 inch pipe shown

on these exhibits does collect water from various other pipes which flow into it.

A. Yes. It is the ultimate repository of all that water, yes.

Q. In the water treatment field, in your expertise, is that a sewer?

Mr. THORNBURGH. Objection, Your Honor. He is not qualified as an expert. If Mr. Gondelman wants to call him as an expert he can.

Q. Do you know whether or not that is a sewer?

A. Yes, sir. That is a sewer.

The COURT. Well, there is——

Mr. GONDELMAN. If the Court please, he referred to it as a sewer on direct examination when Mr. Thornburgh was questioning him.

The COURT. I don't know whether it makes any difference whether it is a sewer or a pipe.

Q. As I understand it, your company did prepare a report which was given to Mr. Thornburgh pursuant to his subpoena and from which you have testified?

A. Yes, sir, that is correct.

Q. That is the report to which you have been referring?

A. Yes, sir.

Q. You stated that you had been engaged by the Defendant to design a water treatment facility, I believe, on direct examination.

A. Waste treatment facility.

Q. In connection with what you were engaged in and in connection with that study, were you concerned with the iron, aluminum and compounds containing those chemicals and chlorides, phosphates, sulphates and solids?

Mr. THORNBURGH. Objection. That is beyond the scope of direct examination.

The COURT. I think it is, but I am going to permit you to ask it, but as you go into these phases, this man is your witness.

Mr. GONDELMAN. If he is going to be my witness, I'd rather call him in my case.

The COURT. That is perfectly all right. I don't want to inconvenience him or you.

Mr. GONDELMAN. I am going to be here.

Q. These flows from both sewers are treated at the plant. Is that correct?

A. Yes, sir.

Mr. GONDELMAN. I have no further questions.

[Michael R. Watts, having been previously duly sworn, was recalled and testified further as follows:]

DIRECT EXAMINATION

By Mr. THORNBURGH:

Q. Mr. Watts, you heard Mr. Lisanti's testimony as to the type of manufacturing process that was carried on at the Pennsylvania Industrial Chemical Corporation in August of 1970, didn't you?

A. Right, I did.

Q. Based on that testimony and based on the samples which you tested from the discharges at Pennsylvania Industrial Chemical Corporation, and based on your expertise in the water pollution analysis field, is it your opinion that the results of the tests that you ran are consistent with the manufacturing operation that was described by Mr. Lisanti?

Mr. GONDELMAN. That's just a little leading, Your Honor.

The COURT. The objection is sustained. That is a leading question.

Mr. THORNBURGH. I am asking the question as a hypothetical question from an expert witness.

The COURT. But you told him what his opinion was. I think you can ask him what it is.

Q. Let's go back to the beginning. You heard Mr. Lisanti's testimony, didn't you?

A. Right, I did.

Q. You heard him describing the process that Pennsylvania Industrial Chemical Corporation carries on at their plant.

A. I did.

Q. If that description is correct and if that process is carried on at that plant, is it——

Mr. THORNBURGH. I'll withdraw the question.

Mr. GONDELMAN. I have no further questions.

(Whereupon the luncheon recess was taken.)

Mr. THORNBURGH. Your Honor, at this time the Government has no further witnesses to call and rests its case.

Mr. GONDELMAN. I have certain matters to present, Your Honor, at this time.

[Side bar conference.]

Mr. GONDELMAN. I want to make a motion for a judgment of acquittal under Rule 29 of the Rules of Criminal Procedure,

and I would like an opportunity to argue it to Your Honor because I think there are matters which have not been presented before to you that ought to be taken under consideration.

[End of side bar conference.]

The COURT. Ladies and gentlemen of the jury, there are certain legal matters which must be taken care of, the Government having closed its case, with which you need not concern yourselves. These will take approximately fifteen minutes, so we are going to retire the jury while that occurs and we will call you back afterwards.

[The jury left the courtroom.]

Mr. GONDELMAN. If the Court please, at this time the Defendant moves for a judgment of acquittal under Rule 29 of the Federal Rules of Criminal Procedure for the following reasons: First, Your Honor's opening remarks correctly set forth the law that the Government must prove, one, that the Defendant deposited refuse of any kind, and two, in a navigable water, and three, that the refuse matter flowed not from streets and sewers. That is what Your Honor said in the opening. I therefore at this point move for a judgment of acquittal for the reason that the Government has affirmatively proved in its case in chief that the two outlets from which these samples were taken are sewers, one a public sewer, one a private sewer.

In addition, I move for a judgment of acquittal for the reason that under the Federal regulations as they now exist, anyone who does discharge refuse, if it be such, in a navigable stream, has until July 1, 1971, to apply for and secure a permit from the Federal Government. Those regulations are published in the Federal Register and I deem that they are applicable to a trial concerning the Act of 1899 taking place subsequent to the adoption and promulgation of those rules. Basically, those are the two reasons, and I think that would be all that would be required on the record.

[Argument off the record.]

The COURT. You have presented a very capable argument. The motion is denied.

Mr. GONDELMAN. Are you denying them or taking them under advisement?

The COURT. No. I am denying them.

[The jury was returned to the courtroom.]

Mr. GONDELMAN. With permission of the Court, ladies and gentlemen of the jury, Mr. Thornburgh, it is my duty now to open to you on behalf of the Defendant, Pennsylvania In-

dustrial Chemical Corporation, so that you will understand what the defense is insofar as the matters that you have heard about that took place on August 7 and August 19, 1970, when these samples were taken from the pipes and sewers of my Defendant's plant on the Monongahela River. As you have been able to tell, I am sure, many things in this case are undisputed; that is, there is a discharge that comes out of pipes, comes down the bank. That discharge comes from the Defendant's plant. The issues that really will be for you to decide will depend mainly in this case, at this point, on the action of the Corps of Engineers, the implementation of the Act of March 3, 1899. That is the statute under which Mr. Thornburgh has instituted this criminal information against the Defendant.

You understand that this is a criminal case. The Government has the burden of proving its case beyond a reasonable doubt. The Defendant is presumed to be innocent until that presumption is overcome beyond a reasonable doubt. His Honor Judge Teitelbaum will instruct you as to the law and you take your law from Judge Teitelbaum. If I misquote the law it is inadvertent. Lawyers and judges frequently disagree on what the law is. We have courts that go up from here. The Supreme Court decides a case and everybody wonders whether the five to four decisions of the Supreme Court are right. Judge Teitelbaum will give you the law as he sees it.

I am arguing the facts as I see them. Mr. Thornburgh will argue the facts as he sees them at the conclusion. Mr. Thornburgh, I think, reminded you that what I say now and what he says is not evidence. What we try to do under our system of justice is have a lawyer tell you what he thinks he is going to prove. We sometimes misstate what we think we are going to prove because a witness may answer a little differently. Please remember, the only evidence in this case will come from that witness chair, what that witness tells you. I am going to try to point the path, draw the map, so to speak, as to the direction we will be going, but the details come from witnesses and exhibits. If I misstate any of it now or later in my closing, if Mr. Thornburgh does or even if His Honor Judge Teitelbaum does—it is possible sometimes Judges do—they will tell you you don't take the evidence or the facts from the Judge or the lawyers, only from the witness stand. Believe me, if any of us do, it is inadvertent. Sometimes you think you heard something differently than it really was. You rely on your recollections and the evidence.

We are going to put Mr. Lisanti back on the stand. He will testify as to his expert qualifications in water quality control and why he was hired in June, 1970, before the samples were taken by Dr. Zavodni and Mr. Nixon. He will tell you what they were designing and why they were designing it. This water treatment facility cost about $300,000 and was for the purpose of taking certain matters out of the water before it was discharged into the Monongahela River, but what they were designing had very little to do with the items with which we are charged; not with the iron and the sulphates, because you heard Mr. Watts testify there wasn't enough iron to worry about. Mr. Lisanti will tell you why he was hired, what he was attempting to do, what he was in the process of doing and that while this treatment facility was being planned it had to be okayed by various officials.

Then we will put on—I am not too sure who. I think there is a Mr. Dore who is with the Corps of Engineers, a Government employee, and we will ask him about the permit program under the Act of 1899. I think we will be able to show you that there has never been a permit program under the Act of 1899 until 1971, seventy-two years later. The Act of 1899 provides for the Corps of Engineers to issue permits.

We will show you, incidentally, after Mr. Dore's testimony, through probably Mr. Johnston, the vice-president of the Defendant, that in 1949, 1950 and 1956 that applications were made with the Corps of Engineers for permits. We will show you the folders that the Corps of Engineers gave us at that time because they related to permits for structures in navigable waters. When you went in to build a barge or dock loading facility out of wood, metal, concrete block, what have you, they had to approve what you were doing so it would not interfere with the navigation of the river. You had to go to the Corps of Engineers and we went to the Corps of Engineers, I believe, three times and they gave us permits for a water intake pipe so we could take water out of the Monongahela, so the Corps of Engineers knew where we were, knew what we were doing.

We will show you then in March of 1971, for the first time in seventy-two years, the Corps of Engineers now have an application form to apply to the Corps of Engineers for a permit to discharge liquids into the Monongahela River as opposed to building structures in the Monongahela River. The purpose of that will be to show to you—in fact, part of the testimony from

Mr. Johnston will be that he once asked the Corps of Engineers about other permits and they told him there were no other permits required.

You see, this is a criminal case. We are charged with unlawfully depositing refuse matter into the Monongahela River. The question is whether we did it lawfully or whether what the Defendants did in connection with their operation was something unlawful under the law as it then existed. We will get that evidence to you.

Mr. Thornburgh will argue the case from the Government's point of view. I will argue the case from the Defendant's point of view. Then there may be rebuttal and surrebuttal where we will take another crack at closing to you. Then His Honor Judge Teitelbaum will charge you on the law applicable to this case. Then and only then will you twelve—one will be dismissed by then—be in a position to decide this case according to the law, according to the evidence.

I can only say to you that the system of trial by jury in this country is an absolute must for the protection of a democratic process because nobody knows which twelve jurors are going to sit on a jury, neither defense nor Government. No one can influence you in any way other than in this courtroom, and then your decision must be in accordance with your oaths as jurors to decide the case according to the law and the evidence as you hear it in this courtroom. If you do that, we will be certain that justice in this country will continue to be served. Thank you.

[Side bar conference.]

Mr. THORNBURGH. It is not my practice to interrupt counsel in his opening and I do not want to interrupt Mr. Gondelman, but there are a number of matters that he referred to that I think are clearly inadmissible in his defense, and I think the jury at this time should be instructed to disregard them. The fact that they spent $300,000 for some facility to remove other items from the water is clearly inadmissible and clearly not a matter for this jury. The whole matter of Mr. Lisanti's being hired to clear up some problem has nothing to do with this case. I won't object to Mr. Lisanti taking the stand, but I think it is proper that the jury be admonished to disregard that portion of his testimony.

Secondly, with respect to the permit program that has been the gist of the whole argument here, it is irrelevant to this

proceeding and I request the jury be admonished to disregard those comments of Mr. Gondelman.

Thirdly, with regard to applications made for structures and the like, they don't bear on the question of applications for discharge. There is no showing, no indication that an application for discharge was made with respect to these specific discharges prior to the date in question. I think the jury ought not to be led down the primrose path.

The COURT. On that last point, as I understand Mr. Gondelman's argument, because of this they did not have the necessary intent?

Mr. GONDELMAN. That's right.

Mr. THORNBURGH. There is no intent question involved in this and we are prepared to argue that.

Mr. GONDELMAN. How are you going to show it is unlawful?

Mr. THORNBURGH. Unlawful merely means it is against the law to do it. What we are really concerned with is really knowingly——

Mr. GONDELMAN. You are concerned with, in part, the fact that in this case the Defendant was told by the Corps of Engineers that he did not need the permit by the very act of the——

The COURT. If somebody walks into my chambers and tells me, "I earned $100,000. Do I have to file income tax," and I say, "No," that doesn't mean he doesn't have to file income tax.

Mr. GONDELMAN. On the other hand, if the Court please, to use your example, if he takes you down to the agent of the Government, and you say, "I have this problem. Here are my tax returns. This is my total income. How do I treat it?" They say, "If you put this here and here I will figure it out for you," and the agent for the Government does, the man signs the return and the Government comes in and indicts him——

The COURT. That's what I'm trying to point out. The question is what kind of an intent we are concerned with. This is mala prohibita, this is a misdemeanor, and I am not sure if you have to have that kind of intent. With the income tax thing you have got to intend to wrongfully deprive the Government of tax, but now when you get into mala prohibita, I think the rule is that the only intent required is met if you recklessly fail to make the appropriate inquiry.

Mr. THORNBURGH. The Court has held in Refuse Act cases that the element of scienter is not required. The Supreme Court specifically said they are not going to pass on it.

The COURT. I am going to tell the jury that in your opening you made reference to things which may or may not be in accordance with my final charge and that I am not going to ask them to disregard it at this time. I am going to ask them to wait until my final charge before they reach any conclusion, merely pointing out that this is the evidence.

Mr. GONDELMAN. That's all right. What I said isn't evidence.

The COURT. As to the $300,000 and what he was hired for, I agree——

Mr. GONDELMAN. Let me show you why that's so inconsistent. We were hearing from the Penn State instructor and we went back to June and questions were asked, "What was your motive in going out there? How much did you pay for a canoe?"

Mr. THORNBURGH. I can put your witness's motive into question, but you can't.

Mr. GONDELMAN. "How much did you pay for a paddle," and all this stuff came in and it established nothing. I don't know what it was supposed to prove. We went through about an hour and a half. It all totaled up to about $170. I want to show that we are in the process again of producing the water treatment facility and have been in that process before Nixon and Zavodni took their samples, and the Corps of Engineers knew we were there in connection with this discharge, to show again that we were motivated by good faith.

The COURT. But you can't show that you hired him to correct some condition not here concerned.

[End of side bar conference.]

The COURT. Ladies and gentlemen of the jury, counsel was quite correct, and I think I told you, too, we all can make mistakes on the recollection of the facts, counsel and the Court. One advantage of having a one-man court is that there can't be many five-four decisions. The openings that were made are not evidence, as I told you in the beginning. These are merely road maps of what somebody intends to introduce here in court. You must not treat them as any more than that. It may be that either Mr. Thornburgh or Mr. Gondelman said they were going to offer certain kinds of proof, but when they do the Court might rule that that kind of proof is irrelevant and not admissible, so the fact that you were told that you will hear certain kinds of things certainly does not mean that you will. For example, you were told that you will be offered evidence as to why this company was retained in a water control program. Apparently they were retained to put in controls which have nothing to

do with the matters here at issue, so it may be that when that is offered Mr. Thornburgh might object to it and I might sustain the objection, so you must not consider that what Mr. Gondelman said he would offer or what Mr. Thornburgh said he would offer will be admitted into evidence. If it isn't you must not consider it at all.

You must also consider that counsel made their openings in good faith and didn't do that with the intention of saying anything they shouldn't have said, but under the American system of justice counsel on each side, being advocates, present the strongest case they can. They offer the strongest proof they can. The Court, being neutral, might feel contrary about it and you have to only consider the evidence that you actually hear. I hope you understand what I am trying to say. Don't hold anything against Mr. Gondelman's clients if some of the things he said he would prove he doesn't get the proof on, but also don't consider the fact that they were stated as having any bearing on the case whatever.

Mr. THORNBURGH. I would like an offer of proof, Your Honor.

[At side bar.]

Mr. GONDELMAN. You want an offer of proof. I offer to prove, first of all, that Mr. Lisanti is a qualified expert.

Mr. THORNBURGH. We will stipulate to that.

Mr. GONDELMAN. He is stipulating to his expertise. That's fine. That will save five minutes.

I offer to prove that he is familiar with the Defendant PICCO's premises, the water discharge situation there, that they are designing a water treatment facility which, with the exception of perhaps one item in the indictment, has nothing to do with the indictment, but it is for the purpose of upgrading the Defendant's plant to show that this Defendant is not just discharging pure cyanide into the water, as Your Honor indicated perhaps as an example.

The COURT. Not in the presence of the jury, I don't think.

Mr. GONDELMAN. No, of course not, but the fact is it does go to the type of Defendant this is and what they are doing and whether they are acting in total disregard of the law.

The COURT. That is introduced to show they are good boys.

Mr. GONDELMAN. To show they are a good company more conscious of environment and water quality control than Nixon or Zavodni. The fact is, I have to show by this witness and I also intend to show by this witness that every item that the

Government has offered to prove by Mr. Watts, even though he isn't a water expert, he is a chemist——

Mr. THORNBURGH. Wait a minute. Are you going to make that argument?

Mr. GONDELMAN. No.

Mr. THORNBURGH. Because if you are I want to reopen my case to prove his qualifications.

Mr. GONDELMAN. I am not going to argue that.

Mr. THORNBURGH. Well, then don't make statements like that.

The COURT. You can let him testify that he was hired to devise or design a water treatment plant and I think that's as far as you ought to go with it. I don't think you ought to show what he was trying to cure.

Mr. GONDELMAN. I don't intend to show it.

The COURT. In other words, what kind of conditions he was trying to cure. If you want to bring it out, it is your baby and you open it up, but I don't think offhand either how much they were spending or what it was he was trying to take out of the water has anything to do with the case.

Mr. GONDELMAN. Getting down to the meat of this case, so you will know what the offer is as it bears on this case, I will ask him specifically as to each item on Mr. Watts' exhibits as to whether or not those matters are refuse as that term is defined by people in the water pollution industry because that is what your criterion is, not what some Supreme Court said without having a definition before them and without——

The COURT. Do you really think you can do that?

Mr. GONDELMAN. Of course I do.

The COURT. You can ask him whether in his opinion these matters are matters of industrial waste. That is what Mr. Watts testified.

Mr. THORNBURGH. Sure.

The COURT. I don't want you to ask anything about whether or not they are, in the opinion of the people that are enforcing the water control program or concerned with——

Mr. GONDELMAN. No. I am asking whether, in the clean water industry, whether the items which the Government has charged that we have placed in the Monongahela River are considered to be either industrial waste or refuse or pollutants.

The COURT. You can ask whether they are industrial waste because that's what you asked Mr. Watts. I am going to define

industrial refuse, too. You can ask him whether they are foreign substances, but I am going to have to define refuse.

Mr. GONDELMAN. It shouldn't be done either in a vacuum, even if the vacuum was written by the Supreme Court of the United States.

The COURT. Here are the ground rules. Ask him whether they are industrial waste, foreign substances, whether they got in there some other possible way except through the Defendant, but you cannot ask him whether or not it is refuse because I am going to define refuse, and any factor that has to do with that definition you can ask him about, but not the conclusion.

Mr. GONDELMAN. This witness, on the issue of refuse, is offered as an expert witness in water cleanliness and control which Mr. Thornburgh has stipulated he is.

The COURT. All right, but we are not concerned with water control of cleanliness. We are concerned with whether somebody threw those things in the water.

Mr. GONDELMAN. The fact is that this witness would then testify that in the industry, which is the water pollution industry, the items which the Defendant PICCO is charged with having discharged, and therefore being refused under the Act, is, in fact, in the industry not considered refuse.

The COURT. He can't testify to that.

Mr. THORNBURGH. You can't have the industry usurp the Courts and the Legislature.

Mr. GONDELMAN. They do it all the time, but I understand Your Honor's ruling.

Mr. THORNBURGH. I don't want to have to stand up and object every five minutes.

[End of side bar conference.]

[Anthony Frank Lisanti, a witness called in behalf of the Defendant, having been previously duly sworn, testified as follows:]

Mr. GONDELMAN. First of all, would you put on the record the stipulation by Mr. Thornburgh that he is an expert in the water—how do you want to phrase it, Mr. Thornburgh, lest I make a mistake?

Mr. THORNBURGH. You try.

The COURT. Do you want me to make a stab at it?

Mr. GONDELMAN. Then I can't be wrong.

The COURT. Quite clearly I can be. I just want to get something on the record since we are getting Alphonse and Gaston here. Everybody says, "You go first."

This man is stipulated to be an expert on the question of water, water analysis and water purification. Is that all right?

Mr. GONDELMAN. Does that satisfy you, Mr. Lisanti, as a definition of your qualifications?

The WITNESS. I guess it will have to.

The COURT. No, it won't have to. If you are an expert on something else, tell us.

The WITNESS. I would rather you say "waste," since that's what we are doing, industrial waste treatment.

The COURT. All right. You are expert on industrial waste treatment. Is that acceptable, Mr. Thornburgh?

Mr. THORNBURGH. Fine.

Mr. GONDELMAN. And analysis?

The WITNESS. And analysis.

DIRECT EXAMINATION

By Mr. GONDELMAN:

Q. By whom are you employed?

A. Chester Engineers.

Q. How long have you worked for them?

A. About eight years.

Q. I think you have already testified that in June, 1970, your firm was engaged by the Defendant to do some work in connection with the water treatment. Is that correct?

A. That's correct.

Q. You were to design a plant for them?

A. We were to develop a pollution abatement schedule and design a plant, yes, sir.

Q. Mr. Lisanti, you have been in the courtroom yesterday and today. Is that correct?

A. That is correct.

Q. You have heard Mr. Watts testify and Nixon and Zavodni and the others?

A. Yes, sir.

Mr. GONDELMAN. Forgive me for leading, but I think I can shorten it up a little bit.

The COURT. Go ahead until Mr. Thornburgh objects.

Q. You were furnished a copy of the analysis of Mr. Watts that the Government used and had the large——

A. Yes, sir.

Q. Have you reviewed those analyses yourself?

A. Yes, sir.

Q. Mr. Lisanti, in your professional opinion, were the matters which were analyzed in a liquide state or in some other state?

A. Liquid state, no question.

Q. Do you have those charts? Maybe I can do it by letting you testify directly from them instead of waiting for the big ones.

The COURT. Do you have a copy of the report itself?

Mr. GONDELMAN. I have it here somewhere, Your Honor, if I can put my hands on it.

I've got it.

Q. Would you take a look at those—ignore my scribbling—and I ask you if you can recognize that those are the analyses?

A. Yes, sir.

Q. I show you what has been marked Government's Exhibit 7 and I ask you if you can tell by looking at Government's Exhibit 7 whether that analysis constitutes industrial waste?

A. Well, first of all, from an engineering standpoint it is foolhardy to attempt to look at an analysis and say whether it is industrial waste or any other material without knowing flows, poundage, sources. Let me give you a couple of examples, including Mr. Watts' example. You look at the pH. It is alkaline, but there are many household products, many things you can use to produce that alkalinity. To look at an analysis and say it is industrial waste, I don't think that is engineeringly possible. If you know the total picture, then you can tell whether or not it is, in fact, a discharge from an industry.

Q. In order to determine whether a matter is industrial waste, is the contents from the sample itself sufficient or are there other factors which you must know in order to make that determination?

A. To repeat myself, you must know other information. Just looking at a quart jar and analyzing—unless there was something such as cyanide, yes, that comes from industry. That doesn't come from foodstuffs, but if you see, as I say, if you see chlorides, that's salts. Chloride is chloride. Whether it is table salt or hydrochloric acid you are going to see chloride. Sulphate again is sulphate, whether it is a cleaning compound—you will get tremendous quantities of sulphate from household products. The same with alkalinity, so to make a judgment without some specific industrial pollutant, such as cyanide, lead, chrome, something that is toxic, then I think one should, at least an engineer, should not make a judgment.

Q. Is it important in your industry when you are determining the question of industrial waste, to know into what receptacle or what stream of water that sample is going to end up in?

Mr. THORNBURGH. Objection, Your Honor. The question is irrelevant. What is done in the industry has no bearing on the question of law involved.

The COURT. All he asked him is whether or not he can answer the question.

Mr. GONDELMAN. As to industrial waste.

The COURT. Objection overruled.

A. Yes, obviously you must know what is the source water. You must know that sort of data, yes.

Q. When you say "source water," what do you mean?

A. Well, if your intake is river water and, as Mr. Watts demonstrated, there are 200 parts sulphate and you are putting water out, you are going to assume you are going to get 200 parts of sulphate back out.

Q. My question now is, on the other end when it is being discharged from a pipe, a sewer, can you, by simply sampling at the discharge point, determine what is or is not an industrial waste without knowing what it is going into?

A. Oh, no. No, sir.

Q. Why not?

Mr. THORNBURGH. I renew my objection to that question and move the answer be stricken because it is not relevant to the purposes of this proceeding. We are dealing here with the discharge itself.

The COURT. That is what he is asking him.

Mr. THORNBURGH. He asked him if it is important to know what it is being discharged into.

The COURT. He said, can you, coming out of a pipe, tell what it is if you don't know what it is going into. I don't know what the answer is going to be.

Q. The question is as it relates to industrial waste.

A. Unless there is something that is readily identifiable, for example, if there is textile dye coming out of it, you are safe to assume that is coming from a textile plant, or if you have a tremendous quantity of insoluble material coming out such as shale deposits, you could say that that is from industry, but if you look at a solution that has 140 parts of suspended matter and this sort of analysis, you would not know that that is industrial waste until you knew the facts behind it.

The COURT. He is asking you if what you are pouring it into has anything to do with it?

Q. Does the fact that this matter from this sample is going into the Monongahela River——

The COURT. Or a bucket or any other thing.

Q. [Continuing] does that have anything to do with your determination as to whether or not what is in the sample is or is not industrial waste?

A. Yes, primarily because the State and the Federal Government have established water quality standards.

Mr. THORNBURGH. I object and move that it be stricken.

The COURT. The jury is instructed to disregard it.

When something is coming out of a pipe and an analysis is made of it, if you know what industrial waste is, can you tell if it is industrial waste or not without knowing what the receptacle into which it flows is going to be?

Q. Without knowing the water flow of the river, the amount of water in the river and the like.

The COURT. Does that have anything to do with what the contents of the effluent are? Do you understand the question?

The WITNESS. Yes. What is coming out of the pipe is coming out of the pipe. What is in the river is in the river. I'm lost.

Q. Without worrying about what is in the river, is it necessary in your determination of industrial waste to know that if it goes into the Monongahela River, do you have to know the rate of flow into the Monongahela River, the amount of water and other such factors to make your determination, under a given set of circumstances?

Mr. THORNBURGH. I object to the question as being irrelevant.

The COURT. I think it is relevant. This is a question as to whether or not Mr. Watts could tell whether it is industrial waste.

Q. Without knowing what it is going into and the water flow. This is basically what I am asking you.

A. No.

Q. Your answer to that question is no?

A. No.

The COURT. No, what? You couldn't tell?

The WITNESS. No, you could not tell just by looking at the pipe whether it is industrial waste.

Q. Or by looking at the sample?

A. Or by looking at the sample.

The COURT. You couldn't tell by looking at the sample whether that is industrial waste or not?

The WITNESS. This particular sample.

Q. That would be true of the four samples that you have reviewed?

A. That is correct.

Q. Without going into any other regulations or agencies—do you follow me?

A. Yes, sir.

Q. Without getting into that, can you tell me why not? Can you tell me why not you cannot tell whether something is industrial waste without knowing what it is going into?

The COURT. What we are interested in is what is coming out, not what effect it is going to have after it gets some place.

The WITNESS. It is tough to answer in that frame of reference.

The COURT. That's the question.

The WITNESS. Yes, I appreciate that. Well, my best judgment is that you must know the receiving receptacle to determine whether or not it is industrial waste because—I keep coming back to effect.

The COURT. No, no, we are not interested in effect.

The WITNESS. That is why I am having a difficult time answering the question. I cannot answer that without getting into the effect.

Q. Your answer is you cannot tell whether it is industrial waste without knowing what it is going into?

A. That's right, sir. I will get myself into these other matters about which I have been restricted.

Q. Is there any question in your mind, sir, that the exhibits, 230–1, which you have before you, 230–2—just take a look at it for a moment—231–1 and 231–2, can you tell us whether, in your opinion, those matters were in a liquid state?

A. Yes, they were in a liquid state.

Q. Could you tell us whether any of those samples contained materials which would have in any way interfered with the navigability of the stream known as the Monongahela River?

Mr. THORNBURGH. Objection.

The COURT. Overruled.

A. Certainly not because when you ask that question you must look at the total pounds and what is going to be deposited in the navigable rivers and you also look at suspended matter which is the only thing that can be deposited. You are talking about insignificant quantities. You wouldn't even see them on

the river. You could not detect these in the Monongehela River.

The COURT. You weren't asked whether or not you could detect them. Will it stop ships from going up and down the river or in any other way impair navigation?

The WITNESS. No. It is inconceivable.

Mr. GONDELMAN. Cross-examine.

CROSS-EXAMINATION

By Mr. THORNBURGH:

Q. Mr. Lisanti, you testified that simply by looking at those analyses that are set forth on the exhibits, simply by looking at them you could not say they were industrial waste.

A. No, sir, you certainly couldn't.

Q. You certainly couldn't say.

A. No, not by just looking at an analysis.

Q. You said you would really have to know the total picture before you could decide whether these were——

A. Yes, sir.

Q. You would have to know the process that was involved that gave rise to those discharges, wouldn't you?

A. Yes, sir.

Q. You would have to know the products that were used?

A. Certainly.

Q. You would have to know the sources of all of the outflow that eventually came out from the——

A. That's correct.

Q. You would have to know all that.

A. Yes, sir.

Q. How do you define an industrial discharge? Is it only one that contains a cyanide?

A. No, sir.

Q. How do you define it?

A. I define an industrial discharge in our profession the same as the State and Federal Government defines it, which is something that is pollutional in nature. Something that contravenes or violates standards is, in fact, industrial waste.

Q. That is how you define industrial discharge?

A. I believe that's how sanitary engineers do it.

Q. When you use the words "industrial discharge," you are going back to the standards that the State and Federal Govern-

ment use and you say you can't tell just by looking at these samples whether they are industrial discharge.

A. Yes. I am doing that and I am also stating that merely looking at chlorides, sulphates and so forth does not per se indicate that is industrial. It could be household, it could be many many other things.

Q. You have to know a lot more about it?

A. You certainly do.

Q. Wouldn't one way of defining industrial discharge be "discharge from an industry?" It may not be your way.

A. You say "industrial waste?"

Q. Waste from an industry.

A. We get back to industrial waste, waste water. Yes, that's one way. I wouldn't define it as industrial waste, obviously.

Q. You said you couldn't tell whether or not this was industrial discharge when you said it didn't have anything toxic, any cyanide and the like in it. Is that the test you would use in determining it to be specific industrial discharge?

A. I would try to pinpoint—if I had this blank sample, a quart sample, and you asked me if this was an industrial waste, my first question would be, "What industry is it from?" I wouldn't attempt to make a decision, finding sulphate or solids in it.

Q. You would have to determine or have somebody tell you what exactly went into the process, the chemicals and the like?

A. That is correct.

Q. Just as you testified this morning.

A. Yes, sir.

Q. If you had the samples and if you had the backup data on the process being used and the exact type of chemicals that were being used in that process, you could make a determination as to whether or not it was industrial waste?

A. Yes. Again, you have compounds here which are not very specific to a process, particularly this process. That is our problem here.

Q. Let me ask you about these samples.

A. Yes, sir.

Q. Government's Exhibit No. 7, 230-1. Do you know the process at Pennsylvania Industrial Chemical Corporation?

A. Yes, sir.

Q. You have looked at that sample. Is that industrial waste?

A. That is an industrial discharge. I would not say waste. It is really not the waste from that product.

Q. Let's look at 230–2. You know the process, you can look at the sample. Is that an industrial discharge?

A. Yes. We have run an analysis and——

Q. Let me ask you about 231–1. You know the process, there is the sample. Is that an industrial discharge?

A. As I say, it could be from the industry, it could be from other places, but that's correct.

Q. 231–1 could be from an industry or other places?

A. That's right.

Q. What other place could it be from?

A. The six inch pipe.

Q. Yes, from the plant.

A. Yes, that's right.

Q. 231–2, what you call the B-polymer.

A. Yes, that is industrial discharge.

Q. I believe your testimony was that you couldn't tell whether a given sample was an industrial waste not only if you didn't know the process but if you didn't know what it was going into. Wasn't that your testimony?

A. That's right. Again, in my frame of reference as to what is industrial waste, pollutional, I must know what it is going into.

Q. Would it make a difference if it was going into a wheelbarrow and being carried away?

A. Sure.

Q. It would make a difference. What difference would it make?

A. It is the effect on the wheelbarrow.

Q. I'm not asking about the effect.

A. How are you going to judge industrial—

Q. Are you telling me it doesn't make any difference except for the effect? I am suggesting to you that what comes out of the pipe comes out of the pipe regardless of what it goes into.

A. Well, what comes out—except if what it goes into is used in the process, then obviously you must take that net effect.

Q. I think you said in response to Mr. Gondelman with respect particularly to 230–1—you might want to look at this again.

A. Is this A-polymer?

Q. This is A-polymer. When Mr. Gondelman asked you about this you said it might be household waste.

A. It is conceivable. It has all the characteristics of some of the compounds you would normally find.

Q. You know the process at Pennsylvania Industrial Chemical?

A. Yes, sir.

Q. Do you think it is household waste? Do you really think that is household waste?

A. I will tell you that it is not specific to PICCO's process.

Q. You really think that is household waste?

A. I really think that you have not determined specific quantities which pinpoint those to PICCO, yes, sir.

Q. Let me ask you about No. 230–2, which is the same outfall taken on the 19th of August. Do you think that is household waste?

A. That I would doubt because of the pH.

Q. Where do you think that came from?

A. I'd say certainly a good portion of that came from PICCO, yes, sir.

Mr. THORNBURGH. No further questions.

REDIRECT EXAMINATION

By Mr. GONDELMAN:

Q. The portion in 230–2 that you say came from PICCO and, again as you define industrial waste in your business and your profession, are the matters contained in 230–1, 230–2 and 231–1 and 231–2, in your expert opinion, are those matters industrial waste?

A. Only the pH and the high concentration of aluminum in one of them. Other than that, as I am sure anybody can demonstrate, they will be found, in fact, in drinking waters. Many in this country have exactly the same concentrations.

Mr. THORNBURGH. I move that the answer be stricken as not responsive. He is getting into the standards.

The COURT. Let's get him down to the point.

Q. I will simply ask you whether, in your opinion, that would be industrial waste in your industry and in your opinion as an expert and knowing the flow of its receptacle, being the Monongahela River.

A. That would not be industrial waste from PICCO. That is not the industrial waste we are concerned with from PICCO.

Q. As that term is defined in the water pollution or control industry?

A. That is correct.

The COURT. So that I clarify my thinking on this, sir, if you take the effluent from this pipe and you put it in a great big sterile water glass container—now, you have got it in there. At that stage you say you can't tell whether it is waste or not?

The WITNESS. No, sir.

The COURT. You can't tell?

The WITNESS. No, sir.

The COURT. So if you take it and put it into a small pond of water, now could you tell, knowing that it is a small still pond, whether or not it was waste?

The WITNESS. You could tell it has obviously some effect on that.

The COURT. See, you are talking about effect.

The WITNESS. Yes, sir, I have to.

The COURT. If you put it in a pond it is one thing, if you put it in the ocean it is something else?

The WITNESS. Certainly. That is my problem.

The COURT. I know what you are saying.

By Mr. GONDELMAN:

Q. In fact, what the Judge just asked you as to the fact of whether it goes into a pond or ocean or river, that is what you as an expert must know in order to make your determination or your analysis?

A. Yes, sir.

Q. In fact, am I correct, that in preparing a water treatment facility what you would prepare for a small stream may be different than what you would prepare for a large stream?

A. You would certainly have to.

Q. Because of what it is going into?

A. Yes, sir.

Mr. GONDELMAN. I have no further questions.

The COURT. But that wouldn't change the quality of where you were going to throw it. All that would do is change the effect it is going to have.

The WITNESS. Yes, that's correct.

By Mr. GONDELMAN:

Q. The effect it is going to have is what your industry uses in determining whether or not it is industrial waste?

A. That's right.

RECROSS-EXAMINATION

By Mr. THORNBURGH:

Q. So we have a clear distinction between what you call industrial waste, which is something that you speak of in terms of the industry and in terms of effect, and industrial discharge, which you have described all four of the samples here as being——

A. Yes, sir. In my frame of mind I have to differentiate.

Q. I understand that. I am sympathetic with your difficulties being——

The COURT. We have a technical problem.

The WITNESS. I appreciate that. I am having problems, too.

Q. But you would have no problem identifying the samples in these four bottles, knowing the process which produces them, as industrial discharge. You do have a problem reaching whether or not they are industrial waste because you have to get into matters that the Court is not permitting you to. Is that correct?

A. That is obviously correct.

Q. Do you know any other way to collect water samples than in a liquid state?

A. Water samples?

Q. Yes.

A. If it is water it has got to be in a liquid state.

Q. How about a liquid matter? You can't collect samples of any liquid matter other than in a liquid state, can you?

A. No, no. If it is liquid you collect liquid.

Mr. THORNBURGH. I have no further questions.

(Whereupon Court recessed until Monday morning, June 28. 1971.)

JUNE 28, 1971.

Mr. THORNBURGH. Your Honor, may we have an offer.

[Side bar conference.]

Mr. GONDELMAN. If the Court please, Mr. Helwick is a chemist employed by Chester Engineers. He has run certain tests, taking the Government's exhibits and analyses of the discharges of August 7 and August 19, including the pH factors. He has certain samples prepared to show that the discharges and the percentage of discharges, the pH factors, chloride factors, are not industrial waste per se, that they do have common household derivatives. We have the fluid samples to show what

is or was not in a liquid state since there was some question about whether or not 15 pounds per million is a liquid state. We have 20,000 pounds per million, which is a clear fluid that Your Honor and the jury would be able to see is in a liquid state. He is going to testify that he took water and he added a detergent, he has a coffee solution, he has a sodium chloride solution to show what—

Mr. THORNBURGH. What water?

Mr. GONDELMAN. Just plain ordinary water, and he added substances.

Mr. THORNBURGH. Without a showing that that water is the same water that wastes from this operation we are into, I'd object to the whole line of testimony.

The COURT. He is going to show how the solution of this kind is in a fluid state? Isn't that what you are saying?

Mr. GONDELMAN. First, that it is in a liquid state, and two, that it comes from many, many household uses.

The COURT. All right. In other words, if he can show that what your man says was in there could come from household waste, it's relevant, I think.

Mr. GONDELMAN. It's common waste; coffee.

Mr. THORNBURGH. He is, in effect, impeaching his own witness. The other expert, his opinion——

The COURT. He is using it to contradict your expert.

Mr. THORNBURGH. It was his witness who testified that all four of these, as Mr. Lisanti on his case, not my case, testified——

The COURT. Who did you have testify?

Mr. THORNBURGH. Mr. Watts.

The COURT. Isn't that who you are attempting to contradict, not impeach your own witness?

Mr. GONDELMAN. That is correct.

Mr. THORNBURGH. Aren't we stipulating as to the accuracy——

The COURT. The accuracy of his analysis, but not that it is household waste rather than industrial waste.

Mr. THORNBURGH. I get back to the opinion expressed by Mr. Lisanti, his first expert. His opinion was that it came from the operations of the Defendant. Is he putting this man on to contradict Mr. Lisanti, that it didn't come from the operations of the Defendant? Does he have one witness to corroborate Mr. Watts and one to contradict him?

Mr. GONDELMAN. Mr. Lisanti testified that without knowing all the factors you could not look at the chart and tell——

Mr. THORNBURGH. I think we can strike Mr. Lisanti's testimony in bulk. I don't think he testified to anything.

Mr. GONDELMAN. I think you could do it with Watts, too.

The COURT. I don't agree with that. He said based on the criteria that he had available he couldn't reach any conclusions.

Mr. THORNBURGH. I don't see the relevance of this testimony.

The COURT. This waste is going into one of these outlets—that's the basis of two of the counts—from these houses. You had a man that says these kinds of products come from a manufacturing process. His man is going to say no, they didn't. They come from twenty houses. I think that's a relevant thing.

[Robert Helwick, a witness called in behalf of the Defendant, having been duly sworn, testified as follows:]

DIRECT EXAMINATION

By Mr. GONDELMAN:

Q. Would you state your full name, sir.

A. Robert Helwick.

Q. Where do you live, Mr. Helwick?

A. In Kennedy Township, 1045 Middlebank Drive in Kennedy Township.

Q. Are you married?

A. Yes, sir.

Q. Do you have a family, sir?

A. Yes.

Q. Where are you employed?

A. Chester Engineers.

Q. Would you tell us what your educational background is.

A. I have a Bachelor of Science degree in chemistry from the University of Pittsburgh, received in 1965.

Q. How long have you beem employed at Chester Engineers?

A. Three years.

Q. Mr. Helwick, did you receive copies of analyses made of certain discharges that are involved in this case?

A. Yes, I did.

Q. I show you, sir, what have been marked Government's Exhibits 7, 9 and 12 and ask you if these exhibits are the analyses which were shown to you, although they may have been in this form, the small form.

A. Yes, they are.

(Defendant's Exhibits B, C and D were marked for identification.)

Q. I now show you, sir, what have been marked Defendant's Exhibits B, C and D and ask you if you can identify what is shown on those exhibits.

A. Yes. After I had reviewed this analysis we attempted to see whether we could duplicate these analyses using regular household items. For example, on Defendant's Exhibit B, which, looking at Exhibit 7, of interest was the pH of 8.8, the alkalinity, the aluminum and the total solids. What we attempted to do was to take these regular household items and we used, as a source of aluminum, we used Kaopectate, and we used a detergent, Miracle White, which we used to adjust the pH. We also added some ordinary table salt, sodium chloride, for the solid content.

Q. I show you what has written on it 230–1–4 and ask you if you can identify what that substance is.

A. Yes. We took ordinary tap water and we added Kaopectate. Actually, I have the amount we had added. Well, it is approximately enough so we would get about 40 milligrams per liter of aluminum. We added about two ounces of Kaopectate to a quart.

Q. Two ounces of Kaopectate to a quart of water?

A. That's right.

Q. And that gave you the analysis which you would get as to 230–1–B or Exhibit B?

A. That's right. We also added some ordinary table salt, just approximately an eighth of a teaspoon.

Q. An eighth of a teaspoon of common table salt. Is that sodium chloride?

A. Yes.

Q. That's what gives the chloride content?

A. That's right.

Q. Is that an eighth of a teaspoon to a quart?

A. Yes.

Q. Will you tell us all the things you did loudly so the Judge and jury can hear you so I won't have to repeat it.

A. Okay. Then we added enough Miracle White detergent to bring the pH to 8.8 and it took approximately one gram per liter of detergent, which would be roughly a teaspoonful per gallon or so, and we came out with the following analysis as

to this Defendant's exhibit. The pH should have been 8.8, total solids, 3,953, alkalinity 260 parts per million.

Q. Would you mark on that exhibit what your pH factor is. There is a typographical error.

A. Yes. It should have been 8.8.

Q. The other figures on the typewritten exhibit are the same as those of your notes, sir?

A. Yes, they are. There are no phosphates, a thousand parts chlorides, 200 parts of sulphates.

Q. In relation to a housewife using detergent in a washing machine, could you tell us, if you know, how much detergent was used in connection with this solution as it would relate, say, to one load of wash in a washing machine?

A. Well, assuming that the housewife would use a cup to a cup and a half per washer load, this would probably be one-fifth or less. She would use five times the amount at least.

(Defendant's Exhibit B–1 was marked.)

Q. I show you, sir, what has now been marked Defendant's Exhibit B–1 and Defendant's Exhibit B and ask you if these two items relate to each other?

A. Yes, they do. This is the analysis for this particular sample.

Q. As a chemist, do you have an opinion, sir, as to whether Exhibit B–1 is or is not in a liquid state?

The Court. Let's find out what he is talking about. What does he mean by a liquid state?

The Witness. When I speak of a liquid state I would think that all the solids are in solution. There are no suspended solids.

Q. With that definition in mind, is it your opinion that Defendant's Exhibit B–1 is or is not in a liquid state?

A. Yes, it is.

Q. When you defined the term for Judge Teitelbaum, is that the definition of the term as it is used in the industry?

A. Yes, it is.

The Court. Tell me, sir, could those items that you have said, could that be in a substance and be in a suspended as well as a liquid state? You have got them in a liquid state. Could this be in a suspended state?

The Witness. Most chlorides most probably would always be in solution. With the aluminum it would depend on certain factors. If you had just plain distilled water, the ionized water, no other compounds in it, and you added aluminum and the pH was right, let's say around 7, the aluminum could

form aluminum hydroxide and be in a suspended state. If the pH was higher than, let's say, 10 or lower than 5, the aluminum would be soluble.

The COURT. So it could be in either a solid or a liquid state?

The WITNESS. Depending on what compounds and what conditions.

The COURT. Did you see the samples, the fluid that was taken from these pipes?

The WITNESS. No, I haven't.

Q. If there are suspended solids in a liquid, in your opinion, would 15 pounds of suspended solids in one million pounds of water render that particular solution a solid or would it still be in a liquid state?

Mr. THORNBURGH. I object to that, Your Honor.

The COURT. Sustained. That isn't the question.

Mr. GONDELMAN. Certainly I beg to differ.

The COURT. You have a right to differ with me, but I don't think that's the question.

Q. That Exhibit B relates to Government's Exhibit 7. Is that correct?

A. Yes.

Mr. GONDELMAN. If the Court please, I offer in evidence Defendant's Exhibit B and Defendant's Exhibit B–1, being the solution itself.

The COURT. Hearing no objection——

Mr. THORNBURGH. I do object. I don't see any relevance to these series of tests that have been performed on another substance here. The questions that are involved and the tests taken are the actual discharges from the pipe, and I am going to object to them on the grounds of their not being relevant to this proceeding.

The COURT. I am going to admit them as relevant only on the question of whether they could or could not have come from household discharge. I am not going to admit them on that argument about whether it is solid or liquid.

Mr. GONDELMAN. I accept Your Honor's ruling, of course, because I think there is no argument about whether it is solid or liquid.

The COURT. That wasn't what I ruled. I think you know that. This man says that it could be solid and it could be liquid. Therefore, I am not allowing it in for the purpose of whether it was a solid or liquid. You can put anything into a liquid state

if you control the circumstances, or you can put anything into a solid state.

Mr. GONDELMAN. Based on the circumstances as he testified they existed, they were in a liquid state.

The COURT. No. I don't think so and I'm not going to admit them for that purpose.

(Whereupon Defendant's Exhibits B and B–1 were admitted as indicated by the Court.)

By Mr. GONDELMAN:

Q. I show you now, sir, what has been marked Government's Exhibit 9 and Defendant's Exhibit C and ask you if those two relate to each other?

A. Yes. Once again, we looked at this analysis and, using ordinary household items, we wanted to see if we could add these items into water and see what analysis we would have. What we did, we took a cup of coffee with cream and sugar and we added 80 milligrams per liter of aluminum in the form of Kaopectate again, and we ran the analysis on it. The pH of this was 6.6, the aluminum content was 80 milligrams per liter, 540 parts chloride. We also added some table salt, sodium chloride, and we found total solids of this coffee plus Kaopectate was 71,000 milligrams per liter. By the way, we also ran this coffee without the Kaopectate and we had 64,000 milligrams per liter solids.

(Defendant's Exhibit C–1 was marked for identification)

Q. Based on the factors as shown in Exhibit C and the solution which has now been marked Exhibit C–1, without what could or could not be, but rather as a matter of an expert giving his expert opinion, is Exhibit C–1 in a liquid state or in a solid state?

A. Right now——

Mr. THORNBURGH. I object to that, Your Honor. That is the same——

The COURT. Sustained. I don't care whether that sample is in a liquid or solid state. I am concerned with what came out of the pipes. This man said in answer to my question it could be either liquid or solid. We did have an analysis of that made and it is on the record, so I sustain the objection.

Mr. GONDELMAN. If the Court please, I offer in evidence Exhibits C and C–1.

The COURT. I am going to admit them for the purpose I said. We will let the argument go to the jury.

Mr. THORNBURGH. I would object, Your Honor, to the introduction of both these exhibits into evidence in that they relate to the outfall at No. 231, which is an in-plant outlet, and there has been no evidence as to any household waste into that. I would move that all these exhibits and all the testimony thereto be stricken.

Mr. GONDELMAN. This is 231, Your Honor.

The COURT. I will sustain the objection. There was no household flow into that, unless you plan to show such a flow.

Mr. GONDELMAN. No, Your Honor, and I assume the ruling would be the same as to Exhibit D and D–1 which I had marked which relate to 231–2.

The COURT. Is that the concrete pipe? I will admit that in evidence.

(Whereupon Defendant's Exhibits D and D–1 were admitted into evidence.)

Mr. GONDELMAN. I believe the only one relating to the concrete pipe is Exhibits B and B–1, but I am offering these and I would want it made part of the record.

[Side bar conference.]

Mr. THORNBURGH. I didn't realize until I saw that sheet which one he was talking about.

The COURT. Are you going to show that there is any way household waste could have gotten into the other pipe? If you can, I will certainly admit it.

Mr. GONDELMAN. I don't know what could have gotten into that pipe, but since Your Honor has already indicated that you were going to somehow define "refuse" in the abstract and nonpertaining to particular substance matter, I think it is relevant to show that what you define as "refuse" is no more than ordinary household waste, whether it is in our pipes or not. It doesn't matter whether it comes from twenty houses around our plant or whether it comes from our plant, it is still, under a given set of circumstances, not refuse in anybody's legal definition of it, and the jury can't decide this case in a vacuum, but they must know what is or is not refuse. The purpose of this offer is to show that under a given set of circumstances, a teaspoon of salt will produce more chloride than is found in what you are going to define to the jury as somehow "refuse."

The COURT. Could Kaopectate or coffee with cream have gotten into the iron pipe which was only carrying the flow from that polymer?

Mr. GONDELMAN. I don't think as to 231. As to 232 it could have gotten into the pipe, but the point of the offer is that the same substances which came out of that pipe are commonly used household substances which also flow into streams.

The COURT. I understand your argument. I have sustained the objection.

Mr. THORNBURGH. I ask that the jury be instructed to disregard all except the first series of things as to B and B-1. I should have objected in a timely fashion. I wasn't on my toes.

[End of side bar conference.]

The COURT. Ladies and gentlemen, you will recall two outlets. One was a concrete pipe containing household drainage as well as the effluent from the industrial plant. As to that, I have admitted evidence that what they found there could have been the result of household products flowing into the concrete pipe. The other was a little iron pipe that didn't have any outlet from any house, any residence, so even though you could perhaps have produced what came out of there from household waste, since it didn't have any, I have sustained the objection as to the iron pipe and I ask you to disregard any testimony as to what could have caused that substance to be in the iron pipe. Of course, if any evidence is introduced to show that there was any such outlet into the iron pipe, I will reconsider, but as of right now, I am sustaining the prosecutor's objection only as to the iron pipe, not as to the concrete pipe.

Will you tell me what exhibits refer to the iron pipe?

Mr. GONDELMAN. The only one in evidence, Your Honor, Exhibits B and B-1, and C——

The COURT. B and B-1 have been stricken and C and C-1, and you are instructed to disregard anything you may have heard about how anything could have gotten into that iron pipe.

Mr. GONDELMAN. It is B and B-1 which are admitted.

The COURT. B and B-1 are admitted because it comes from the concrete pipe.

Mr. GONDELMAN. Because it relates to the exhibits which compare from the two foot concrete pipe.

The COURT. It relates to the effluent from the concrete pipe. That is before us. The others are not.

Mr. GONDELMAN. As I stated, that also goes as to D, as if I want through the same offer only we might as well save time because I am sure the ruling would be the same.

The COURT. Right.

By Mr. GONDELMAN:

Q. I am now showing you, sir, what has been marked Defendant's Exhibit E and ask you what is in that exhibit.

A. This is ordinary tap water to which we added 20,000 milligrams per liter of sodium chloride, common table salt.

Q. You say 20,000 milligrams of common table salt. Could you tell us how big a milligram is? Something that we can relate to. What is 20,000 milligrams?

A. Well, this is, of course, equal to 20,000 pounds of sodium chloride per million pounds of water. It is about a teaspoonful in about a quart of water, or perhaps a glass of water, eight ounces.

Q. A teaspoonful of ordinary table salt in a glass of water?

A. Yes, that's right.

Q. And you say that is equivalent to 20,000 pounds of sodium chloride in a million pounds of water?

A. Right.

Q. Is that in solution or is that somehow a solid or what is it?

Mr. THORNBURGH. Objection, Your Honor. That is the same type of question.

The COURT. Same thing as I sustained the objection to before, unless you establish that it could only be one way. If it could be both ways then it doesn't serve any purpose.

Mr. GONDELMAN. I don't think I can ask him, "Could this be something," could I, Your Honor?

The COURT. Yes, you could; could it be either solid or in a solid or liquid state?

Q. Well, let's take the Judge's question. Mr. Helwick, looking at Defendant's Exhibit E, could that be in a solid state——

The COURT. That's not my question. Could these contents be in an effluent in either solid or liquid state? I am perfectly aware that this could only be one. I want to know if those contents could be in an effluent in either a solid or a liquid state?

Q. The Judge asked you a question. If you want to answer it I don't have any objection.

A. These contents would probably be in, under ordinary conditions, a liquid state. The only way you could get that precipitated out is if you add so much sodium chloride and exceed the saturation——

The COURT. In other words, ordinarily sodium chloride will

be in a liquid state. It is not going to be in suspension. Is that right?

The WITNESS. That is right, if you put it in water.

Q. Would you tell us proportionately what this jar contains so far as liquid and solids are concerned?

A. This has 20,000 milligrams per liter of solids, sodium chloride, which is a teaspoon in about a glass of water, which is about—well, if someone were to gargle with it, they would probably use two or three times that amount.

Mr. GONDELMAN. I offer in evidence Defendant's Exhibit E, Your Honor.

Mr. THORNBURGH. Objection, Your Honor, again on the ground of relevancy.

The COURT. Is there any one of these things that only had sodium chloride? We are going to admit that for the purpose of proving to you, ladies and gentlemen, that if you put salt in water it will dissolve.

Mr. GONDELMAN. And remain in a liquid state.

The COURT. Oh, yes, and remain in a liquid state. Anybody that has put salt in water and stirred it up could make their test.

CROSS-EXAMINATION

By Mr. THORNBURGH:

Q. Mr. Helwick, when did you run these tests?

A. Saturday.

Q. Where?

A. Chester Engineers' laboratory.

Q. How long did it take you to run these analyses?

A. Well, of course, we were busy preparing them, but the actual running of the analyses probably would take, on all the samples, about two hours, three hours.

Q. So you spent about three hours on Saturday running these tests that resulted in the data you brought in today?

A. Yes.

Q. Referring to what has been marked as Defendant's Exhibit B, you ran, I think you stated, a test for total solids. Is that correct?

A. Yes.

Q. Did you run a test for volatile solids?

A. No.

Q. Fixed solids?

A. No.

Q. Did you run a test for suspended solids?

A. No.

Q. Your total solids figure was 3,953?

A. That's right.

Q. You know what those solids are, don't you?

A. For the most part, yes.

Q. They are Kaopectate?

A. Right.

Q. Table salt?

A. Right.

Q. And Miracle White?

A. Right.

Q. Are you familiar with the manufacturing processes that are carried on at the Pennsylvania Industrial Chemical Corporation plant at West——

A. No.

Mr. GONDELMAN. Objected to as incompetent and irrelevant and beyond the scope of direct. Of course, he has already said no.

The COURT. It has already been answered. He said he is not.

Q. Have you had any experience with Chester Engineers in the analysis of industrial waste?

A. Yes.

Q. Can you think of any industry that might produce waste that had a profile similar to that contained in Defendant's Exhibit B?

Mr. GONDELMAN. Objected to as irrelevant, incompetent and immaterial, nor was the witness offered for that purpose.

Mr. THORNBURGH. He stated it came from detergents, Kaopectate and table salt. I want to find out what else it may have come from.

The COURT. I think that's okay.

Q. Is there any industry in your experience in analysis of industrial waste, is there any industry which produces waste with a profile similar to that which you found on Exhibit B?

A. The aluminum industry perhaps.

Q. The aluminum industry. Any other industry?

A. It would depend on—of course, aluminum—this analysis, if you had a malfunctioning water treatment plant, would produce this.

Q. Then there are two things, the aluminum industry or a

malfunctioning water treatment plant. How about an industry that used a substantial amount of aluminum chloride?

A. It would be likely that they would produce that analysis.

Q. Comparing this, your code No. 230-1-D, set forth on Exhibit B—I'll show you the big one—with this one which is Government's Exhibit No. 7, code 230-1, the pH factor is exactly the same, isn't it?

A. Yes.

Q. The alkalinity on Government's Exhibit 7 is about four times that on your Defendant's Exhibit B.

A. Yes.

Q. It is 1,070 on Exhibit 7 and 260 on Defendant's Exhibit B. The aluminum is about the same, isn't it, 40.4 on Government's Exhibit 7 and a flat 40 on Defendant's Exhibit B. The chloride is about 50 times higher—in fact, it is 50 times higher on Defendant's Exhibit B.

A. Yes.

Q. It is 20 on Government's Exhibit No. 7 and 1,000 on Defendant's Exhibit B. The sulphates are 262 on Government's Exhibit 7 and 200 on Defendant's Exhibit B. The total solids on Government's Exhibit No. 7 is 12,898, and on Defendant's Exhibit B, 3,953. Suspended solids, 140 on Government's Exhibit No. 7 and you didn't run a test for suspended solids on Defendant's Exhibit B.

A. No.

Q. Looking at Government's Exhibit 7 and again based on your experience in the analysis of industrial waste, are there industries, in your experience, which would produce a waste with that kind of profile?

A. Yes.

Q. What industries would those be?

A. Again my main attention turns to aluminum. It would have to be something or some industry concerned with aluminum, and again it would be the plants I mentioned before. It could be a water treatment plant, it could be an aluminum plant. If you forgot the aluminum it would be like from any other industry. Any plant would fit into that.

Q. If you forgot the aluminum would that be a typical industrial waste sample, would you say?

A. It is certainly possible.

The Court. Does this refer to the concrete or iron pipe?

Mr. THORNBURGH. This is the concrete pipe. Defendant's Exhibit B relates to that.

I have no further questions.

REDIRECT EXAMINATION

By Mr. GONDELMAN:

Q. Could that exhibit also be, and does it contain, matters which would be other than industrial waste?

A. Oh, certainly. It could contain—well, the sulphate is from ordinary tap water which I wouldn't consider industrial waste. The hardness, ordinary tap water will have at least that and probably four times that amount. The pH is what would be, may be found in tap water. Tap water will run from 7 to 9.0. This is 8.8. The alkalinity is perhaps a little high, but it could be—well, ordinary tap water would be maybe 200 alkalinity.

Q. How about the iron?

A. The iron, .4 isn't unusually high. In some tap waters, although .3 is the limit, you may find .4.

Mr. GONDELMAN. That's all, sir.

RECROSS-EXAMINATION

By Mr. THORNBURGH:

Q. Do I understand you to say that your expert opinion of code 230–1, the large placard that is in front of you, is that that profile of chemical water analysis is of ordinary tap water or could be of—

A. No. Excluding the total alkalinity, the aluminum, and perhaps the high solids, the rest of the analysis could be ordinary tap water.

Q. Exclusive of those three?

A. Yes.

Q. The high alkalinity, the aluminum and the high solids?

A. Yes. I mean, everything else would be—

Q. How many other things are there?

A. There is hardness, there is iron, manganese, although that is perhaps a little high, but there are some tap waters or well water certainly has it, chlorides, sulphates, and that's about it.

Q. From your knowledge of water analysis, you would ap-

prove of tap water that had 0.1 parts per million manganese in it?

A. The rule of health organizations says you can drink up to 1 part, as many as 4 parts now. If you get a higher concentration the solution will turn to a purple color, but .1, I don't think, is toxic and you will probably find it in well water.

Q. Well water?

A. Most probably if you go into city waters where they have treatment plants, most probably the manganese would be substantially less.

Q. How about 140 parts per million of suspended solids?

A. Of course, this wouldn't be found in the tap water.

Q. You wouldn't find that in tap water?

A. No.

By Mr. GONDELMAN:

Q. Mr. Helwick, on that exhibit that Mr. Thornburgh just asked you about, there is shown total solids, 12,898.

A. Yes.

Q. Volatile solids, 753.

A. Yes.

Q. Fixed solids, 12,145.

A. Yes.

Q. And then suspended solids.

A. Yes.

Q. Would you tell us what the volatile solids and the fixed solids are in relationship to the liquid in which they were found?

A. Well, to determine the total solids you at first essentially evaporate the solids. You take out all the water and whatever solids remain would be the total solids. Then at 600 degrees C you burn these solids. Whatever is remaining would be fixed solids. The difference between the total solids and the fixed solids are the dissolved solids. They could be carbonates, which is an inorganic material, or they could be organic material.

Q. How about their solution or dissolving in the mixture from which you evaporated all of this? Are they in that mixture and dissolved or in a solution like Exhibit E? How are they found?

A. In that particular sample the only thing that would tell you whether it was dissolved in that particular solid would be the suspended solids. Fixed and volatile couldn't tell you.

By Mr. THORNBURGH:

Q. You didn't perform these tests in your mixture of Miracle White, Kaopectate and salt?

A. No, sir.

[Side bar conference.]

Mr. GONDELMAN. If the Court please, I call Mr. Dore as for cross-examination. He is an employee of the District Engineers office, Corps of Engineers, Department of the Army, and the Plaintiff is the United States of America in this case. I call him pursuant to a subpoena which I issued to Colonel West to bring with him all regulations promulgated by the Corps of Engineers under the Act of March 3, 1899, together with all rules and regulations which have been posted relating to the provisions of Section 407 of said Act as well as 411 and 419 of said Act, together with a list of all places where such regulations have been posted, conspicuous and appropriate places for the information of the public, forms and applications for permits to deposit any kind of refuse matter whatever, any description whatever, into any navigable water of the United States, and specifically the Monongahela River.

The COURT. You can't call him as for cross-examination. That's clear.

Mr. GONDELMAN. He is an employee of the Plaintiff.

The COURT. The rules don't permit that. They can't be an employee. He has to be an officer.

Mr. GONDELMAN. He is an officer. Should I get Colonel West, who is officially an officer? He is in charge of the rules and regulations.

The COURT. You served the subpoena on him to bring certain documents. There is no reason to call him as for cross-examination. He is going to produce whatever the documents are.

Mr. GONDELMAN. I will reserve the right if he is hostile.

The COURT. If he is hostile, but the Federal Rules of Criminal Procedure—actually the Rules of Civil Procedure—I presume it is the same—they have to be managing director or something like that. Will you stipulate that there were no permits obtainable for——

Mr. THORNBURGH. No, I will not, and furthermore, I object to this witness being offered absent a showing that any application was made by the Defendant for a permit for the Act requires, specifies, that the obtaining of a permit is a defense

and without a showing that a permit was obtained no testimony given by the Corps of Engineers' agent would be admissible.

The COURT. Well, his argument is apparently since this information was not posted—you are not claiming lack of knowledge of the——

Mr. GONDELMAN. I am claiming under the regulation applicable to 407 the Engineers had a duty to inform the public and have since this year been informing the public.

The COURT. You are saying the Corps of Engineers owed a duty to tell the people the law?

Mr. GONDELMAN. Right, under 419 they had a duty to post this information and, in fact, I will show they did in certain instances not relating to the discharge of refuse, I will show that the regulations and the public notice given by the Corps of Engineers related solely, by their own publications, publications of the United States of America, to that area involving impeding navigation. I will further show that Mr. Johnston, vice-president of the Defendant corporation, when he applied for the permit to have a water intake and to build a barge and to build a fence and do other things, some of which inured to the benefit of the United States, or they would have lost their dam on the river, asked whether any other permits were required and was told they weren't. In fact, they had none.

The COURT. I am going to sustain the objection to the total line of testimony because, as I see it, whether you could or could not get a permit is irrelevant and whether you knew or did not know that you needed it is irrelevant. Relevant proof would be, I think, if they didn't know they were putting that stuff in the water, but not that they didn't know that they weren't allowed to put pollutants in the water.

Mr. GONDELMAN. Then I would like, out of the hearing of the jury, and with Your Honor, to mark and identify each and every exhibit for the Court of Appeals. I want to protect the record by making an offer. I have their documents.

The COURT. We will order all the documents this man has produced sealed.

Mr. THORNBURGH. We will stipulate as to what he has produced.

Mr. GONDELMAN. You are stating that the fact that the Corps of Engineers has never had a permit program in Pittsburgh and the fact that we asked for it doesn't make any difference?

The COURT. That's right. I think that's the way the courts have ruled consistently.

Mr. GONDELMAN. Every court decision that Your Honor is taking as a ruling concerns not one offer of evidence. They are motions to dismiss. There is no evidence in the record. There has never been an offer to prove specifically what has occurred in this district which has lulled this Defendant into the position of being here today on a criminal charge.

The COURT. I am perfectly satisfied that there was no way that you could have gotten a permit. As to that I am perfectly satisfied.

Mr. GONDELMAN. But I think I have to be able to prove this. The jury is going to decide in a vacuum—

The COURT. You wouldn't stipulate there is no way that they could have gotten a permit to put the things in the water?

Mr. THORNBURGH. For the purposes of the record in the face of Your Honor's ruling—No, I won't.

The COURT. We will seal the exhibits. I don't know what the jury is going to do if things don't result as you hope. I am going to reserve any ruling ultimately on a judgment of acquittal. I might be able to change my mind. If I thought it made a difference you wouldn't need the jury to help you. I would grant judgment of acquittal, but since I am presently of the opposite way of thinking, I think it would only confuse the issue to the jury if I gave it to them and then told them to ignore it, so we will mark what he has and we will seal it. Everything he has got in that briefcase we are going to seal.

Mr. GONDELMAN. All right.

The COURT. I will direct the clerk to keep it. It will be available for my review or for the Court of Appeals.

Mr. GONDELMAN. The position you are putting me in trying this case is trying this case to a jury in a total vacuum. Under Rule 26 of the Criminal Rules of Evidence the technical laws of evidence have been referred to as archaic and leading to injustice. This is what is happening here. You are asking a jury here to pass upon a thing as if this Defendant did an illegal act without having any knowledge whatsoever of the background, the circumstances, the reputation and the conduct of the Government of the United States itself.

The COURT. I don't really honestly believe that is a matter of defense that you couldn't get a permit or that they didn't give notice that you needed a permit or somebody told him, "These are all the permits you need." I can be totally wrong, of course,

and it might be totally wrong to reconsider. I think that is a matter of law, not for the jury.

Mr. GONDELMAN. I also want to be on the record the fact that in connection with Mr. Lisanti's testimony, Mr. Lisanti would have testified, if permited, that the discharges and the specific analysis on every matter which is related to this, and these informations, are absolutely within the prescribed limits of the Pennsylvania Water quality standards.

The COURT. Yes, but I have overruled that.

Mr. GONDELMAN. But it is not on the record and I want it to be, that every matter discharged by this Defendant is within the prescribed regulations of the Commonwealth of Pennsylvania which have been adopted by the Government of the United States, and that therefore insofar as this actually relates to our dumping, the cases refer to pollutants and refuse interchangeably. As to the Government's own regulations this is not a pollutant.

The COURT. We can list all of this kind of thing later without the jury sitting there and this man sitting there.

Mr. GONDELMAN. All you are going to let me ask this man here is just who he is and if he is here pursuant to subpoena——

The COURT. I want you to ask him if he brought with him, pursuant to subpoena, certain documents requested in that subpoena, at which time I will order them sealed by the clerk.

Mr. GONDELMAN. But we must also understand in connection with what he brought, the things he didn't bring. He didn't bring a scrap of paper relating to any promulgation——

The COURT. You can ask him if he brought everything on that subpoena and if there were some things that were not brought because they were not available.

Mr. GONDELMAN. Can't we do this out of the hearing of the jury?

The COURT. We will excuse the jury and we will do it your way.

Mr. GONDELMAN. Then we are going to get to Mr. Johnston, who is going to show——

The COURT. Are you going to make an offer before you call him?

Mr. GONDELMAN. I am so totally confused. You tell me what you want me to do.

The COURT. You ask this man if he brought the documents pursuant to subpoena and he can answer yes. We will take them

and seal them and then if you want, out of the presence of the jury, to itemize them we will be able to do it for the purpose of showing that some documents weren't in existence. They weren't there.

Mr. GONDELMAN. I am anticipating, I think correctly, Your Honor's ruling on Mr. Johnston. I would say the Defendant isn't going to have any evidence because Your Honor has precluded every scrap of evidence which could possibly show that this Defendant hasn't violated this law.

The COURT. I hope I haven't done it.

Mr. GONDELMAN. You have effectively done it.

The COURT. I don't know what Mr. Johnston is going to say. Mr. Johnston is going to say if that stuff got into that effluent they were not aware of it and didn't know it.

Mr. GONDELMAN. Of course he is not going to say that.

The COURT. That's a defense.

Mr. GONDELMAN. I don't think that's a defense.

The COURT. I think that's the only defense really, that they didn't know it.

Mr. THORNBURGH. I gather Mr. Johnston is going to testify again as to the inability of the company to obtain a permit, and I would interpose the same objection there and I am suggesting, if it is the appropriate time——

The COURT. I would make the same ruling.

Mr. GONDELMAN. But the point just made shows the dilemma the Defendant is in. You are saying that Mr. Johnston isn't going to be permitted to testify that he knew it but he also knew he was allowed to do it.

The COURT. The only way he is allowed to do it is to have a permit.

[End of side bar conference.]

[John P. Dore, a witness called in behalf of the Defendant, having been duly sworn, testified as follows:]

DIRECT EXAMINATION

By Mr. GONDELMAN:

Q. State your full name.

A. John P. Dore.

Q. Where are you employed?

A. United States Army Engineers, District Office, across the street in the Federal Building.

Q. How long have you been so employed?

A. For over thirty-one years.

Q. Is the Corps of Engineers delegated by Congress the enforcement of the Refuse Act?

Mr. THORNBURGH. Objection. I think it is quite clear what counsel and the Court agreed upon as far as this witness's testimony. I ask Mr. Gondelman to proceed accordingly.

The COURT. I don't know who is delegated the authority to enforce the Refuse Act.

Q. Who promulgates the rules and regulations under the Refuse Act?

A. I believe it is the Secretary of the Army as spelled out in the law.

Q. Is that delegated to the Corps of Engineers?

A. Chief of engineers.

Q. Chief of engineers?

A. Yes, in the district office of the Corps of Engineers.

Q. You have been employed in the district office of the Engineers of the United States of America for thirty-one years?

A. That is correct.

Q. I show you what has been marked Defendant's Exhibit F. Except for the fact that it is addressed to Colonel West—he is the Chief Engineer?

A. Yes, that's right. He is our district engineer.

Q. Without reading it aloud, but just read it to yourself, and I ask you if you have seen that subpoena issued by my office before?

A. Yes, I have.

Q. Pursuant to that subpoena have you brought all of the documents which are referred to in that subpoena to court today?

A. All that I have available over there.

Q. If they weren't available you didn't bring them?

A. That is correct.

Mr. GONDELMAN. With Your Honor's ruling, I think that's all I am allowed to ask.

The COURT. Mr. Odderson, I want you to take those documents which were produced pursuant to subpoena and I want you to seal them and retain them for the records in this case. I think we can examine them at some later time because we know he has brought what he has and he says what he didn't have he didn't bring.

Mr. GONDELMAN. I realize that, Your Honor——

The COURT. You mean you think there might be something you want to use?

Mr. GONDELMAN. Not that I want to use, but I want to supplement this package by showing it to this witness who can identify it and it can be also sealed. I want to have a complete record.

The COURT. You have a perfect right to do that.

Q. Mr. Dore, I show you a document and ask you if that is also an official document of the Corps of Engineers?

A. It is identified in the left-hand corner.

Mr. THORNBURGH. Your Honor, I object to these questions and ask that an answer not be received on the basis of the agreement made at side bar.

The COURT. Is that a document that isn't among the ones that have been produced?

Mr. GONDELMAN. Yes, and I asked him to produce them all and I happen to have one that I think is important.

The COURT. Is that a part of the official documents put out by the Corps of Engineers?

The WITNESS. Yes, sir, it is. It is identified as such.

The COURT. All right. That can go with the rest. Don't staple it because that's the one you produced. Let the hooks remain around the rest of them. Do you have any others?

Mr. GONDELMAN. Not for this witness. I have no further questions.

Mr. THORNBURGH. No questions, Your Honor.

The COURT. The reason for that procedure, so you will understand what went on, is that there were certain documents which were subpoenaed which the defense, entirely within their rights, culled because they thought they would be of some assistance to them in this case. I felt they had nothing to do with this case. I excluded them. However, as I told you in the beginning, if I make a mistake, a higher court can correct it, so we are going to keep them. If it becomes relevant a higher court can look at them and decide whether I was right or wrong. That is the purpose of this.

Mr. THORNBURGH. I would like an offer.

(The jury left the courtroom.)

The COURT. We want to know what you intend to prove by the witness. That is the purpose of an offer of proof.

Mr. GONDELMAN. I understand that, Your Honor. I am going to try to make such an offer of proof. I offer to prove by Mr. Johnston that Defendant's Exhibit A. which shows the plan and which has already been admitted in evidence, contains the discharges from about twenty houses which abut the Defendant's property, that it is an open sewer, that it runs down onto the Defendant's property, that it had been an open sewer until the Defendant bought the property, that the Defendant then put a concrete pipe in along its property when the street was vacated by Jefferson Township so that it then went into a closed sewer, but it is nevertheless a sewer which does contain street and surface water and houses.

The COURT. That's a proper offer and that will be admitted.

Mr. GONDELMAN. I further propose to show that Mr. Johnston, as vice-president of the Defendant corporation, that commencing on November 16, 1949, he has been in constant contact with the district engineers of the United States Engineers' office, the new Federal Building, Pittsburgh, Pennsylvania.

The COURT. Since 1949?

Mr. GONDELMAN. Yes, sir.

The COURT. They didn't put that building up until later.

Mr. GONDELMAN. In 1969 the new Federal Building was this building, but things sometimes change. Now it is across the street and we are in the old Federal Building, but back then it was the new Federal Building because the old one was down on Fourth Avenue and Smithfield Street. They tore that down. In 1949 he was in constant contact with the district engineers' office, secured a permit for the construction of a barge landing and a water intake along the Monongahela River at the plant site here in issue, that such a permit was granted by the Corps of Engineers, that the public notice that was circulated by the Corps of Engineers only advertised that it was a matter to interested parties to state objections as to the proposed work from the standpoint of navigation, and that was all that the Corps of Engineers in this district had been concerned with.

The COURT. In the erection of a wharf?

Mr. GONDELMAN. In the erection, in this case, of a barge landing and a water intake. All that is is a pipe in which the water flows.

The COURT. Water intake is where you take the water out of the river?

Mr. GONDELMAN. Yes, but certainly it was a permit which we had to secure from the Corp of Engineers, Department of the Army, and we did on November 30, 1949, secure such a permit.

The COURT. Do you have any objection to that, Mr Thornburgh?

Mr. THORNBURGH. Yes, Your Honor. I have an objection as to relevancy. I don't see that there is any relevance to a so-called Section 10 permit which relates to navigational obstructions and a permit——

The COURT. What is the relevancy?

Mr. GONDELMAN. The relevancy of that is that it was either then in 1949 or perhaps in 1951 or '2 when Mr. Johnston was again in contact with the Corps of Engineers. It has relevancy on two points. It shows that the Corps of Engineers knew we were there, knew we had applied for a permit and had permit forms and applications. There seems to be some thought on Your Honor's part that when Congress passes an act, you must file for a permit, everybody is supposed to run out and find out what kind of a permit to file or what kind of application form to make up.

The COURT. I'll agree. That's my idea.

Mr. GONDELMAN. I know of no instance where the Government of the United States says you must file something that they don't give you ninety-five forms to be made out in seventeen triplicate copies to fourteen different organizations. The fact is Mr. Thornburgh says you ask for it and the fact is Mr. Johnston asked the gentleman in charge of this district office whether any other permits were required in the construction operation of that plant. They asked for a barge permit, water intake, and they had other permits that were asked for that I will go into, and he was told no other applications—and, in fact, if he would have asked for an application for the matters which we are charged with here, the Corps of Engineers would have told you you were out of your mind, you didn't need one. That is what they told Mr. Johnston. That is part of the offer. He did ask for a permit.

The COURT. Permit for what?

Mr. GONDELMAN. The Corps of Engineers inspected the plant. They inspected the construction of the water intake and the barge landing and Mr. Johnston then asked the Corps of Engineers' officer in charge—I think his name was Hardy—

"This is our operation. Are we all right? Do we need any other permits or are there any other things required of us?" He was told no. At that time there were discharges into the river.

The COURT. Did he ask specifically for a permit to discharge industrial waste into the river?

Mr. GONDELMAN. The industrial wastes were being discharged into the river. The Corps of Engineers were there. The question asked of the Corps was, "Is there anything else we need?" The answer was no. In fact, you see the difficulty with trying this case and the frustrations that you and I and Mr. Thornburgh know, but the jury is never going to know that if you would have asked for a permit to discharge water into the Monongahela River you would not have received one because there were none.

The COURT. Why didn't you ask Mr. Dore that?

Mr. GONDELMAN. Because you wouldn't let me.

The COURT. As to whether or not you could get a permit——

Mr. GONDELMAN. You told me that it is irrelevant——

The COURT. Put him back on.

Mr. GONDELMAN [continuing]. That there was not a permit for the discharge of industrial waste.

The COURT. You couldn't have gotten one if you asked for it.

Mr. GONDELMAN. I want to know if there were application forms for it.

The COURT. I'm not sure this helps you. If Mr. Johnston says he asked for a permit to dump industrial waste in the river, I will let you ask that. I am not going to go through a bunch of other kinds of permits totally irrelevant.

Mr. GONDELMAN. The purpose of the other kinds of permits is to show how aware of the operation of the Defendant's plant the Corps of Engineers was so that when he asked if there were any other kinds of permits required of the Defendant, the answer was no.

The COURT. The only comment to that, if the man told him, "No, you don't need any other kind of permit," he was wrong.

Mr. GONDELMAN. He was right as this law operated until March of 1971.

The COURT. As I read the law nobody could operate it that way.

Mr. GONDELMAN. We will try to show that in connection with my offer, Your Honor.

The COURT. We are not going into a wharf and water intake thing and all that kind of stuff which has nothing to do with our case.

Mr. GONDELMAN. For the purpose of showing the dealings with the Corps of Engineers.

The COURT. What will that establish?

Mr. GONDELMAN. It will establish the knowledge of the Corps of Engineers so when they told us we didn't need a permit they knew what they were talking about. This isn't like I am out in the woods——

The COURT. You told me you couldn't get such a permit.

Mr. GONDELMAN. The fact is there was never one issued in their district. Do you want me to ask Mr. Dore?

The COURT. You can ask Mr. Dore if they could have gotten one if they asked for it.

Mr. GONDELMAN. That's a back door way of doing it. I prefer my way.

The COURT. I don't want to listen to a whole bunch of stuff.

Mr. GONDELMAN. I want to ask him if there had ever been in this district——

The COURT. You can ask him that.

Mr. THORNBURGH. I would ask your respectful reconsideration of this point because the Act says that the permit must be sought prior to the discharge in question.

The COURT. I am going to tell the jury that I am letting them have this information. In my opinion, it doesn't make a bit of difference. I want to try to correct Mr. Gondelman's frustrations. I am going to let him ask that question. This is what I am going to let you do in lieu of asking all this other stuff.

Mr. GONDELMAN. The fact is, since you are asking about asking a permit before the discharge, you see, the fact is that a permit was sought, unless you are going to now define——

The COURT. No, no. You can ask Mr. Johnston if he ever sought a permit. I have always said that.

Mr. GONDELMAN. And then if he says he asked the Corps of Engineers if he needed a permit for the discharge and they said no and Mr. Dore says they didn't have permits, they didn't issue permits, what are you going to submit to the jury?

The COURT. I will submit it for such use as they think important. I don't think it has anything to do with this case.

Mr. GONDELMAN. You are going to tell the jury that we sought a permit, the Government didn't have one, but they are indicting us for a crime?

The COURT. Yes.

Mr. GONDELMAN. That helps. This is my record. On November 5, 1951, Commonwealth of Pennsylvania, Department of Forests and Waters, Water and Power Resources Board, Harrisburg, File No. 10717; issued a permit to the Pennsylvania Industrial Chemical Corporation to construct a barge landing and water intake along the Monongahela River roughly complimenting——

The COURT. That certainly has nothing to do with this case.

Mr. GONDELMAN. I am making my offer.

The COURT. Do you object to that, Mr. Thornburgh?

Mr. THORNBURG. Yes, I would.

The COURT. Sustained.

Mr. GONDELMAN. On the 2nd of May, 1952, Corps of Engineers, United States Army, permitted the Defendant to place derrickstone along their property as protection against further erosion immediately upstream from the abutment at Dam No. 3. They had no objection to the work. They approved the work. This is also again to show the Corps of Engineers was on the Defendant's property, knew exactly what was going on and did not in any way complain of lack of permit, offer a permit or any such thing.

Mr. THORNBURGH. I'd object to that.

The COURT. Sustained.

Mr. GONDELMAN. October 13, 1955, Corps of Engineers of the United States Army, upon recommendation of the Chief of Engineers, and under provision of Section 10 of the Act of Congress approved 3 March, 1899, entitled An Act Making Appropriations for the Construction, Repair and Preservation of Certain Public Works on Rivers and Harbors and for Other Purposes, they were permitted to replace piling and repair existing terminal structures and so forth. There is an entire list of matters. It also states "that all parts of the work herein authorized shall be entirely removed from the waterway without expense to the United States and the waterway cleared to the satisfaction of the district engineer." It doesn't give any rights in the waterways, of course, but that is cited there.

Mr. THORNBURGH. That is navigational matter again, Your Honor, and I object.

The COURT. Sustained.

Mr. GONDELMAN. July 23, 1956, Mr. Johnston wrote to the district engineer stating that he had discussed with a Mr. M. V. Harrington of their office on July 19, 1956, a proposal to install a river water inlet suction well and strainer assembly along the left bank of the Monongahela River immediately above the dam at Lock No. 3. This would be on the land side of the harbor line, and so forth. It was at this time when we were installing the intake water system at the Defendant's plant, I believe, that Mr. Johnston specifically asked whether there was any need for a permit to discharge into the river and was told no.

The COURT. I am going to permit him to say that. The rest of it, if Mr. Thornburgh objects, I will sustain it. If he doesn't object, I won't. That's it. Mr. Thornburgh?

Mr. THORNBURGH. I do object.

The COURT. All right. Sustained.

Mr. GONDELMAN. On July 5, 1957 the Corps of Engineers wrote to my client referring to the matter of extending a fence along the north property line to the normal pool shore line on the left bank of the Monongahela River. This was approved, it was approved by the Corps. They inspected it. They were on our property in 1957.

Mr. THORNBURGH. Objection.

The COURT. Sustained.

Mr. GONDELMAN. June 2, 1964, United States Army Engineer District, Pittsburgh Corps of Engineers, at that time in the Manor Building, wrote to our client regarding the installation of a barge cable anchor behind the abutment wall of Dam No. 3, Monongahela River. There was a drawing on the installation of the barge cable anchor. It was approved. They were informed when it was installed, and the matter was inspected by the Corps on our property, referring again to the knowledge of the Corps of Engineers as to what was going on in Jefferson Township by the Defendant.

Mr. THORNBURGH. Objected to.

The COURT. Sustained.

Mr. GONDELMAN. I want to show on June 23, 1965, the public notice of the United States Army Engineer District, Pittsburgh, states that in connection with any matters which they advertised, that all interested parties are invited to state any objections they have to the work from a standpoint of navigation.

That is all the district engineers cared about until just before the presidential proclamation.

Mr. THORNBURGH. I object.

The COURT. Sustained.

Mr. GONDELMAN. I want to show in connection with proving the unavailability of a permit——

The COURT. We are going to let Mr. Johnston say that.

Mr. GONDELMAN. What Mr. Johnston says and what I can prove out of the one side of the mouth of the United States is two different things. That is a public notice issued by the Corps of Engineers, United States Army, dated February 3, 1954, listing fees to be charged by the Corps of Engineers, and at no point is there a fee for discharging water into the river. It is only concerning navigation. April 14, 1954, there is also a list of fees that they set, but there is no fee schedule for a permit for what we were doing.

The COURT. In 1953 and 1954?

Mr. GONDELMAN. Of course, and right up through 1971.

The COURT. That doesn't prove anything.

Mr. GONDELMAN. I can ask Mr. Johnston, after I prove it out of their mouths. I want to prove it out of the mouth of the engineers, not Mr. Johnston. He is an interested party.

Mr. THORNBURGH. The question of fees is not relevant.

The COURT. Permits might be free. I don't know. We will let him put the two documents in.

Mr. GONDELMAN. You say they might be free. It would be nice if somebody would say so.

The COURT. Since I am not likely to try any cases in the future——

Mr. GONDELMAN. I am only trying to give you my viewpoint as I stand here before you. June 12, 1956, to the Commonwealth of Pennsylvania, Department of Health, in conjunction with the application to operate an industrial waste treatment plant at Jefferson Borough, plant of the Defendant, the "surreptitious" actions of the Defendant are shown by the advertisement in the newspapers required under the state law advertising all interested persons were invited to partake and participate in the state proceedings. This is in 1956 and that is when the waste treatment plant was authorized.

The COURT. I don't even know that any of this was going on in 1956 and I don't care.

Mr. GONDELMAN. We must assume 1899 was before 1956.

The COURT. Do you object to that?

Mr. THORNBURGH. I do. This relates, as Your Honor knows, to August 7, 1970.

Mr. GONDELMAN. Pursuant to the public advertisement to the people of the Commonwealth of Pennsylvania, also citizens of the United States, a permit was issued relative to industrial waste to the Pennsylvania Industrial Chemical Corporation which permit, No. 1803, states that subject to certain conditions of which there are seventeen, the only one which the Defendant was told he was not subject to is sixteen, which says—and this is an exemption from the State, the only agency really concerned with pollution until Washington found out about it—that the person wishing a permit, the permittee, shall secure any necessary permission from the proper Federal authority for any outfall or industrial waste treatment structure which discharges into or enters navigable waters and shall obtain from the State Water and Power Resources Board approval of any stream crossing or change of natural stream conditions coming within the jurisdiction of the said Board.

Mr. THORNBURGH. You can put that one in. The State told them they didn't have to go to the Federal Government to get a permit.

Mr. GONDELMAN. That's exactly right. The State told us we didn't have to go to the Federal Government, but we got a permit from the State. You said I can put this one in?

Mr. THORNBURGH. Yes.

Mr. GONDELMAN. Fine.

The COURT. If there is no objection.

Mr. GONDELMAN. On June 25, 1965, the Sanitary Water Board of the Commonwealth of Pennsylvania issued an industrial waste permit, No. 464123, to the Defendant, which is basically the same as the other which regards what we had to take out of certain waters and which also contains the fact that—on one page toward the end of the permit, that permit says, "You are subject to certain conditions attached hereto," and then it says, one, two, through fifteen and seventeen. Sixteen is the one that I was reading from.

The COURT. Sixteen says this permit doesn't permit you to put anything into the water unless you get a Federal permit.

Mr. GONDELMAN. If you will look at the end of the permit it says, "You are subject to the seventeen conditions." The sixteen conditions are referred to, but not No. 16.

The COURT. Where is that? Go ahead.

Mr. GONDELMAN. I'm not offering that one at this time.

Mr. THORNBURGH. What is the number of that one again?

Mr. GONDELMAN. It is 464123, I think, July, 1965.

Mr. THORNBURGH. And you are not offering that one?

Mr. GONDELMAN. No, sir. On November 11, 1970, in connection with the permit program——

Mr. THORNBURGH. Now that one clearly, Your Honor, is past the date we are talking about. I can't see any need to go any further with that.

Mr. GONDELMAN. It is past the date and this is why this whole history is so important and thus relevant. It is a letter from Colonel West to the Defendant, and it says, "Dear Mr. Ostermeyer, It has been reported to me that your property at West Elizabeth, Pennsylvania, is a source of discharges or deposits of refuse matter into navigable waters of the United States. Such discharges are unlawful and subject your company to legal action, unless done pursuant to a permit issued by the Department of the Army under the Refuse Act, 33 U.S.C. 407." This is the first time in the history of the United States since 1899 that the Corps of Engineers told people they needed that permit. In addition, and this is what is important to Your Honor in connection with another ruling that went on the record. "In this connection, public law 91-224"—this is from the Corps of Engineers—"the Water Quality Improvement Act of 1970, approved 3 April, 1970, 84 Statute 91, requires that with a written application the applicant provide a certification from the Commonwealth of Pennsylvania that the discharge or deposit will not violate applicable water quality standards. You should contact Mr. Howard G. Luley, Regional Sanitary Engineer, Region 5, Pennsylvania Department of Health, State Office Building, Pittsburgh, Pennsylvania, to obtain such certification." In the extract they show for the first time what information is required of a potential applicant in an application to be filed with the district engineers. Defendant wrote to the district engineers and then following that I would show that the—this is in part of the restricted matters that Your Honor has—that for the first time in 1971 when the informational bulletins are issued by the Corps of Engineers they show permits for work and structures in and for discharges or deposits into navigable waters. The ones in 1939, 1965, only

any permits for work and structures in navigable waters. There is nothing about discharges or deposits.

The COURT. The concept, this goes back to the basic difference in our view of the law. In my opinion, whether the law was enforced at a prior date or not, it was the law. I don't think any agency, executive agency of the Government, had any right to say, "We aren't going to enforce this." That is why I am excluding the fact that there was no permit, that you couldn't get one. If I am wrong on that, then I am wrong in every ruling practically that I have made.

Mr. GONDELMAN. That is what is frustrating, of course.

The COURT. True, but still that is my view and I can only call them as I see them.

Mr. GONDELMAN. But the other question, you see, comes to what are we here for? Are we trying to fine a Defendant under a misdemeanor or criminal statute and tag the Defendant with a criminal offense when, in fact, now——

The COURT. I absolutely guarantee you that we are not going to brand anybody with a scarlet A or anything——

Mr. GONDELMAN. If the jury convicts, that's what we are branded, whether you think so or not. I also want to show, so that we understand what the permit program is or whether there was one, that for the first time by the documents that have been issued to me, May, 1971, is the first application forms. How anybody could have gotten a permit without knowing that the United States Government wanted all this——

The COURT. They couldn't. What they could do is desist from throwing pollutants into the water.

Mr. GONDELMAN. Your Honor used an interesting term there, "pollutants."

The COURT. Whatever these things are.

Mr. GONDELMAN. If we want to find out whether the Defendant was throwing——

The COURT. "Industrial waste" is the term.

Mr. GONDELMAN. It is "refuse" under the Act.

The COURT. All right, "refuse."

Mr. GONDELMAN. The question is whether a definition of refuse is very easily defined.

The COURT. We are going to make a stab at it.

Mr. GONDELMAN. I want to show in May, 1971, the Corps of Engineers first put out one form and then amended it and put out another form which are the applications for a permit to

discharge or work in navigable waters and their tributaries. It is the first time for such a form, and I don't know how any defendant could have possible made an application and could have known that they wanted all of this data.

The COURT. I understand what you are saying.

Mr. THORNBURGH. I object to all those things that——

The COURT. If you think you will want to appeal, put those in an envelope and seal it and we will keep those, too. Sustained.

Mr. GONDELMAN. I also want to show, in connection with the comment of Your Honor that all you had to do was cease and desist putting the matters into the streams, that under the present state of technology what you are saying is that every industrial concern along the river—and I know you talk about Congress in its wisdom, but Congress isn't alway very wise.

The COURT. I know, but nobody made me powerful enough to reverse the acts of Congress or I might do it to several.

Mr. GONDELMAN. It is not a question of reversing the acts of Congress. The question is, when you come into a court of law and the effect of an act of Congress is, in fact and in truth and in substance, that to take the interpretation of the Justice Department and follow what Your Honor just said is to say then every industrial concern must stop. On the other hand, the comingling of all these statutes and the reading of them in any sense and harmony says that if you read what Congress is now doing in connection with what they did in 1899, which nobody knows what they really did then, you get a harmonious reading of the statutes which permit the economy and the ecology to work side by side.

The COURT. If you're right, I can see you are going to make a national reputation for yourself.

Mr. GONDELMAN. I am not interested in a national reputation.

The COURT. I just don't think you are right. You know the ground rules. Do you want those things sealed? We have this industrial waste permit issued by the Commonwealth of Pennsylvania back in——

Mr. THORNBURGH. Your Honor, I am going to object to that on the grounds that anything that the Commonwealth of Pennsylvania issued, if it was a carte blanche permit to dump anything into the river, is wholly irrelevant to this proceeding.

The COURT. Are you going to object to that?

Mr. THORNBURGH. Yes, I do.

The COURT. All right. Sustained.

Mr. GONDELMAN. Are fee schedules going in?

The COURT. Yes, fee schedules are going in. Mr. Johnston can testify that he could not get a permit, not that the Corps of Engineers said everything was all right when they were on the premises.

[John P. Dore, having been previously duly sworn, was recalled and testified further as follows:]

DIRECT EXAMINATION

By Mr. GONDELMAN:

Q. Mr. Dore, you testified you have been employed for thirty-one years in the district engineer's office.

A. Yes, sir.

Q. In those thirty-one years, sir, do you know whether the Corps of Engineers has ever issued a permit for the discharge of industrial waste into the Monongahela River where such discharge did not interfere with navigation?

A. To my knowledge, no.

Mr. GONDELMAN. I have no further questions.

CROSS-EXAMINATION

By Mr. THORNBURGH:

Q. Mr. Dore, has the Corps of Engineers ever received any application, to your knowledge, for a permit to discharge industrial waste into the Monongahela River?

A. No.

Q. Have they ever received any application from the Pennsylvania Industrial Chemical Corporation to discharge waste in the Monongahela River?

A. No.

Q. Have they ever received an application from the Pennsylvania Industrial Chemical Corporation to discharge waste in the Monongahela River on August 7, 1970?

A. No.

Q. Did they ever receive an application from the Pennsylvania Industrial Chemical Corporation to discharge industrial waste into the Monongahela River on August 19, 1970?

A. No.

By Mr. GONDELMAN:

Q. What area does the District Corps of Engineers cover that you work for? What area is that?

A. The water shed of the Ohio River down to New Martinsville, West Virginia, about 25,000 square miles. That includes the Allegheny and Monongahela River and lesser tributary streams.

Q. Within your geographic area have you received an application from any industrial concern in that 25,000 square miles?

The COURT. It has been answered. He said no.

Mr. GONDELMAN. No. That was addressed to PICCO.

The COURT. I thought you asked him whether he had ever given it to anybody?

Mr. GONDELMAN. No. I asked him if he had ever given permits, and Mr. Thornburgh asked him if he had ever received applications for permits.

Mr. THORNBURGH. I asked him and he said no.

Mr. GONDELMAN. No, with respect to PICCO.

Mr. THORNBURGH. I asked him——

The COURT. Let's save time. Ask him.

By Mr. GONDELMAN:

Q. The question is, in the thirty-one years do you have any knowledge of an application from any industrial concern in the 25,000 square miles covered by your Corps of Engineers having been applied for to discharge industrial waste into the Monongahela, Allegheny or tributaries?

A. No.

[William D. Johnston, Jr., a witness called in behalf of the Defendant, having been duly sworn, testified as follows:]

DIRECT EXAMINATION

By Mr. GONDELMAN:

Q. State your full name, sir.

A. William D. Johnston, Jr.

Q. Where do you live, Mr. Johnston?

A. I live in Mount Lebanon, 99 Standish Boulevard.

Q. Are you married, sir?

A. Yes, sir.

Q. Do you have a family?

A. Wife, one child, one grandchild.

Q. How old are you?

A. Fifty-eight this year.

Q. Mr. Johnston, what is your occupation, sir?

A. I am a chemical engineer. I am vice-president of en-

gineering with the Pennsylvania Industrial Chemical Corporation in Clairton, Pennsylvania.

Q. How long have you been so employed?

A. With Pennsylvania Industrial Chemical, for twenty-seven years.

Q. If my arithmetic is right, that is back to about what, 1944?

A. '44, right.

Q. Were you employed by Pennsylvania Industrial Chemical Corporation when it established its plant in Jefferson Township?

A. I was.

Q. Would you tell us when that was, sir.

A. The property was purchased or the commencement of the purchase was in 1949, early in 1949, and it was gradually added to over a period of time.

Q. Without giving us specific details, Mr. Johnston, were you the agent or the officer at Pennsylvania Industrial Chemical Corporation who would have had contact, say, with the Corps of Engineers?

A. I was, as chief engineer.

Q. You don't have a permit, a Federal permit—limiting it now to Federal—Federal permit to discharge effluent or water into the Monongahela River, do you?

A. None existed.

Q. When you say, "none existed," what do you mean by that?

The Court. Your question was, do they have one, and he said none existed. I assume he meant he does not have one.

The Witness. We do not have a permit. We have applied for a permit.

Q. When was that?

A. The application has been underway since December.

Q. What year?

A. 1970.

Q. Did you at any time have any conversation with a member of the Corps of Engineers as to whether or not the Defendant PICCO—incidentally, what do we call the Defendant?

A. PICCO.

Q. PICCO. Did you have any conversation with a member of the Corps of Engineers of this district regarding whether PICCO was required to have a permit to discharge water into the Monongahela River?

Mr. THORNBURGH. I object to that question unless it relates to a period prior to August 7 or August 19, 1970, the time that the discharge is charged here. Anything after that would be irrelevant.

Mr. GONDELMAN. It would be far in advance of that. It would be 1956.

The COURT. You may answer that yes or no. Did you have a conversation——

Q. Did you ever have a conversation with a member of the Corps of Engineers as to whether or not PICCO required a Federal permit to discharge water into the Monogahela River?

A. Yes.

Q. When was that conversation?

A. In the fall of 1949, at the time we applied for a permit to build the pier, barge landing and water intake.

Q. Do you remember the name of the individual and his position with the Corps of Engineers?

A. I can't be sure of that because it was somebody in the office. At that time the district engineer was Colonel Hardy.

The COURT. You can't say it was Colonel Hardy you talked to?

The WITNESS. I said it was not Colonel Hardy.

Q. It was not?

A. Right.

Q. Do you recall who it was?

A. Not without referring to some pretty old notes.

Q. Do you remember what the person's position was?

A. One of the associate engineers or assistant engineers in the Pittsburgh district office.

Q. In the District Corps of Engineers' office?

A. That's right.

Q. What were you advised then by that individual as to whether or not the Defendant was required to have such a permit?

The COURT. As to that question you may ask him, I believe with all propriety, as a result of that conversation what, if any, steps did you take.

Mr. GONDELMAN. I will ask that question.

Q. I hope you will understand it, sir. As a result of the conversation with someone of the Corps of Engineers' office regarding whether you did or did not need a Federal permit what, if anything, did you do about getting a Federal permit, and if nothing, why?

A. We did not apply for a non-existent permit.

Q. You say "non-existent." What do you mean?

A. There was no permit at that time that was necessary for that type of discharge.

The COURT. Of course, that answer is stricken because whether or not one was necessary is the very question that we are going to have to pass on. I ask you to disregard it as to whether somebody told him that none was necessary. That is a question for you ultimately and for me first. That he didn't apply for a permit as a result of his conversation with that man is a perfectly proper thing.

Mr. GONDELMAN. All right. We have that.

Q. Prior to April, 1971, had you ever seen a Federal application form for a permit?

A. No.

Q. To your knowledge, was an application form in existence prior to April, 1971?

Mr. THORNBURGH. Objection, Your Honor. This witness isn't competent to testify to that.

The COURT. I don't know how he would be since 1899.

Q. All right. Since 1944, when you became employed at PICCO, until 1970, to your knowledge, was there an application form issued by the Government of the United States for a Federal permit for discharge of industrial waste into a river?

A. There was not, neither at Chester where we had a plant, at Clairton, Pennsylvania, where we have a plant, at West Elizabeth or Jefferson Borough where we have a plant, nor was there any at Baton Rouge, Louisiana.

CROSS-EXAMINATION

By Mr. THORNBURGH:

Q. Mr. Johnston, prior to the discharge testified to in this courtroom on August 7, 1970, did you or anyone else on behalf of Pennsylvania Industrial Chemical Corporation apply to the Corps of Engineers for a permit to make such discharge?

A. We did not.

Q. Prior to August 19, 1970?

A. We did not.

Q. Your answer is that you didn't?

The COURT. In other words, you didn't apply?

The WITNESS. We did not apply. That is correct.

Q. Were you aware of the requirement in the Rivers and Harbors Act of 1899 that before a discharge of refuse be made

into a navigable water of the United States that an application for a permit to make that discharge be sought from the Corps of Engineers? Were you aware of that?

A. I was.

Q. Your testimony is that notwithstanding that awareness you made no permit application?

A. Right, because we did not discharge refuse.

Q. Just a moment.

Mr. GONDELMAN. The witness can explain his answer.

A. We were not discharging refuse.

The COURT. That is why he didn't apply for a permit.

Q. That was your opinion.

A. That is correct.

Q. Your opinion was you weren't discharging refuse.

A. That's correct.

Q. It wasn't because some associate engineer in 1949, twenty-one years earlier, had told you you didn't need a permit then. Is that right?

A. It was because we had a state permit to do what we were doing.

Q. You testified that in your opinion you weren't discharging refuse.

A. That is correct.

Q. I thought you told Mr. Gondelman that an associate engineer in the Corps of Engineers had told you twenty-one years earlier that you didn't need a permit anyway.

A. That is correct.

Q. Which reason is it that didn't apply prior to August 7 and August 19?

A. Both reasons. It is the same reason.

Q. One because you weren't discharging refuse and one because the Corps said you didn't——

A. It didn't require a permit from the Corps of Engineers. We had one from the State of Pennsylvania.

Q. Prior to August 7, 1970, did you give any consideration to seeking a permit from the Corps of Engineers to make that discharge?

A. Not to make that discharge, no.

Q. With respect to August 19, 1970?

A. The same answer.

Mr. THORNBURGH. No further questions.

By Mr. GONDELMAN:

Q. I show you, Mr. Johnston, what has been marked Defendant's Exhibit G and ask you if you can identify what those exhibits are.

A. These were public notices that were issued by the Corps of Engineers, Pittsburgh District Office, covering fees for issuance of permits.

The COURT. Dated when?

The WITNESS. Dated 14 April, 1954.

Q. And the second page of that?

A. The second page—actually, the first one was a notice dated 3 February, 1954, which was put out for general comment and upon receipt of comment the final issuance or the final permit fee schedule was issued 14 April.

Mr. GONDELMAN. If the Court please, I offer in evidence Defendant's Exhibit G.

The COURT. Admitted.

[Whereupon Defendant's Exhibit G was admitted into evidence.]

Q. Mr. Johnston, I don't think I asked you this. How does this water get in and out of your plant? Just briefly and quickly, not with too much detail, but what happens to it?

The COURT. You know we are on redirect.

Mr. GONDELMAN. I realize that, but I ask leave to reopen. I have not asked this question. I think it is important.

The COURT. All right.

A. Part of the water which comes through the plant is river water taken from the Monongahela River immediately upstream from Dam No. 3 which lands on PICCO property. The balance of the water which is used in the process comes from public water sources and is either from the formerly Monongahela Valley Water Company or now South Pittsburgh Water Company or from Mountain Water Supply or Westmoreland Water Authority. These waters are used in several ways. They are used as coolants in which case they are merely used to cool heat releasing equipment, or they are used as washing agents for contacting and dissolving soluble material in the aqueous phase. The water also originates from condensation of steam which is used as a distillation aid and in the production of vacuum through steam jet ejectors.

The COURT. This is really a new phase which really wasn't covered by your offer. I am not going to preclude you. We will take it tomorrow morning at ten o'clock.

[Whereupon the hearing was adjourned until Tuesday, June 29, 1971.]

JUNE 29, 1971.

[William D. Johnston, Jr., having been previously duly sworn, resumed the stand and testified further as follows:]

REDIRECT EXAMINATION [CONTINUED]

[Preceding question was read.]

By Mr. GONDELMAN:

Q. Will you pick it up from there and take the water through your plant as it comes out in both outlets, the two foot concrete pipe and the six inch pipe.

A. The water that issues from the two foot diameter public sewer originates as river water and also as water that has been used in washing an aluminum chloride polymerization catalyst system and contains aluminum chloride in solution. It also at that juncture where the streams meet contains the miscellaneous surface semi-sanitary waste and, to some extent, sanitary waste from a group of six to eight houses which are adjacent to but not on the property of PICCO at and near Madison Avenue. The aqueous phase that issues from the so-called six inch pipe comes from the distillation area. As I indicated earlier, the water there comprises water condensed during the distillation, water condensed from steam jet ejectors, water separated from the bottoms of storage tanks which results from moisture picked up from the air and also moisture picked up in contact during distillation and processing. The two streams that I mentioned as far as process streams are concerned, one from the A-poly, so-called, goes through a separating system which is, in effect, an API—it stands for American Petroleum Institute—basic design of water and oil separator used in petroleum-chemical industry where the oils and other non-soluble materials are separated from that aqueous phase. The aqueous phase from the other side, so-called B-poly, comprises, as I said, the contact washing liquids from the B-poly

operation and from the distillation and tank bottom drainage, and that also is treated by being put through a further separating system comprising a series of tanks to minimize the amount of oil that is carried ultimately to the separator. At the entrance to the separator or immediately before the final separator in order to preclude formation or carry-over of emulsions which form between oil and matter something like mayonnaise and milk, it is necessary to add sulphuric acid to adjust the pH because emulsions are quite persistent at high pH levels. Furthermore, it is necessary to bring the pH down to meet state requirements in a river as far as pH level is concerned. The acid that is added at that point ahead of the separator then lowers the pH, permits the emulsions to break and in the separator the oil and water phases are separated by gravity settling and the oil is skimmed off along with any other floating materials which are raised by the additional use of a flotation system which was pioneered under state observation for this type of separator. The effluent that flows from that unit, that final separator, then goes down over the bank through the six inch pipe, so-called, and into the river, and the combination of the two streams have had in excess of 98 per cent of the pollutants removed from them, as prescribed by state requirements, and the effluent is of quality suitable for discharge into the river in accordance with the state requirements.

Mr. THORNBURGH. Your Honor, I ask that that portion dealing with state requirements—I move the answer be stricken as not within the realm of consideration of this proceeding.

The COURT. That is descriptive of the procedure, the process. It doesn't have much to do with this case. We are not at all concerned with what the state standards are. We are concerned with a Federal statute which will be described to you in my charge.

Q. You say that 98 per cent of the pollutants are removed by your water treatment plant?

A. That is correct.

Q. I show you, Mr. Johnston, what has been marked Defendant's Exhibit A and ask if you can identify what is shown on that exhibit?

A. This is a design of a continuation and more or less regularization of the open trench sewer that existed at the time we bought the property which picks up surface and semi-sanitary

and some sanitary drainage from Madison Avenue between the tracks of the Pennsylvania Railroad, Charleston Branch, and the Monongehela River. Since this was somewhat undefined and was running free down the street at the time we purchased the property, we confined this by putting in two box culverts or collecting culverts at the sides of the street, ran those together into an open concrete box trench which covers approximately three-quarters of the length of that street, and into which some of the cooling water is dumped from the process, and then it goes into a 24 inch diameter concrete pipe which is buried and which emerges as you have seen on the pictures through the side of the bank.

The COURT. In this testimony as of what time are you speaking?

The WITNESS. This was designed, Your Honor, August 19, 1952. This was in advance of the operation of this plant.

Q. So that the culvert you described has been there since 1952?

A. That's right.

Q. Would you take my pen and mark on the exhibit where the houses are that have been referred to?

A. The houses are not on the drawing. They are what amounts to really west, up Madison Avenue from the plant property on both sides.

Q. You indicated the left-hand corner of the drawing?

A. Left and right-hand corner. Actually, the upper right-hand corner, but actually up on either side. Madison Avenue from Second Street to the river has been vacated by the city for private use except that they have access, they have a water line and they require access to the river for the snow, and the Corps of Engineers also requires access down Madison Avenue, which is granted, to service the abutment of the dam.

Q. And so the houses then for the jury's information would be off of the exhibit from the left-hand corner going off Madison Avenue?

A. That is correct.

Q. Could you tell the Court and jury what the boxes shown on this exhibit are in the left-hand corner?

A. Those are concrete collecting basins which permit the settling out of gravel, general debris from the unpaved street. This street is not paved. It is a township secondary street and they merely act as collecting stations where such debris can be

separated from the water flow and the debris then cleaned out by shoveling it out to keep it from getting into the underground piping. They are indicated in Section CC, if this is of interest, as a general cross section view of them.

In other words, this drawing does show a cross section of the catch basins. Is that what you would call them?

A. That's right.

Q. Does street water also flow through that pipe line?

A. Any water that comes down Madison Avenue comes through that. That includes surface drainage from storm, snow melt, the washing liquids from the homes because in this area of Jefferson Borough there is no—nor anywhere else—dedicated sewage system and as such everybody relies upon sanitary facilities in the form of septic tanks, and naturally with the septic tank system you don't put either laundry or sink wash water through the septic tank if you can avoid it, so the standard practice, remembering that this area was developed and some of the houses are at least that old, in about 1900, the common practice is to dump any wash or laundry drainage out to the street, so that also is a part of what flows into this system.

Q. Have you by observation been able to tell whether or not laundry detergent waste water flows through that system, and if so, how?

A. Yes. Every Monday morning those gutters run white coming down to the two box culverts and, of course, continuing on down to the river bank.

Q. In addition to what flows from those houses you said something about what is discharged into that system by the Defendant. Would you tell us specifically what that is?

A. Yes. This is river water which is pumped through minor cooling uses and is used to keep the flow moving in that sewer generally because of the fact that we have a rather sluggish flow with minimal quantities of surface water flowing in it during other than rain or snow conditions. In order to keep the soap suds and so on, miscellaneous debris and whatever, moving on down through that sewer, we maintain one pump that keeps that sewer system cleaned out to avoid problems that might otherwise plague us.

Q. Are there any chemical discharges from your process that go into that sewer?

A. Yes. The wash water, after it has been treated in an API separator at the A-poly is discharged into that, and this con-

tains the aluminum chloride covered by our permit from the state.

Mr. GONDELMAN. If the Court please, I offer in evidence Defendant's Exhibit A, which has been previously identified. You have seen this.

The COURT. Hearing no objection, it is admitted.

[Whereupon Defendant's Exhibit A was admitted into evidence.]

Q. The industry in which your company is engaged, Mr. Johnston, when did it come into being by reason of technology?

A. In the early 1920's. Actually, the industry initiated really with the use of naphthas, crude oils, coke oven light oils and similar materials, so-called drib oils and holder oils from gas-making operations, all of which contain unsaturates which could be polymerized to form hydrocarbon resins. The Barrett Company was one of the earliest in this country. Although the technology had been known in Germany prior to World War I, it was not practiced here. We were incorporated in 1920 and went into this type of business in about 1928.

Q. The plan which you operated at Jefferson Borough was in operation from what date?

A. It started into operation in 1956. Prior to that time, while we had the property, it was being used primarily as a raw material storage area for bulk crude materials received by barge, which is why the Corps of Engineers' permit antedates the starting of the plant.

RECROSS-EXAMINATION

By Mr. THORNBURGH:

Q. Mr. Johnston, as I understand your testimony, the industrial wastes that are dumped out of the plant into this A-poly line are diluted by other wastes that come from the residential community that you have testified to?

A. That is correct, and by river water also.

Q. So that by the time they reach the discharge point, the pipe that was referred to in the picture, the wastes from the operation of the plant are in a solution with a number of other sources that——

A. Discharges, yes, not the wastes. We remove the wastes.

Q. You have testified, I think, that the only reason you dump the waste in there is to keep the soap suds moving, in effect.

A. No. That is the reason for the river water.

Q. The river water?

A. That is correct.

Q. Is to keep the soap suds moving?

A. Right.

Q. Is that only on Monday that the river water is put in there?

A. No, no. It is not only on Monday that the soap suds go in there either.

Q. They are in there every day?

A. Yes. People don't wash every day, but obviously since this comes from sinks and bathtubs, et cetera——

Q. Have you ever been inside any of these houses?

A. Yes. We own two of them now, one of which has been torn down. We have been buying these as they came on the market.

Q. There are seven of these houses?

A. At last count, I think six.

Q. And you have been inside two of them?

A. That's right.

Q. One of them is now torn down?

A. Right.

Q. So you have been inside the other one?

A. Yes.

Q. Was it occupied in August of 1970?

A. Yes.

Q. By a family?

A. Yes, by an employee.

Q. Did you ever see them do their wash?

A. Yes. I know him personally.

Q. Did you ever see them do their wash?

A. No. I never stayed around to see the washer in operation.

Q. Do you know if they have a washing machine?

A. I am not certain of that.

Q. Have you ever been in any of the other houses?

A. Yes.

Q. Have you been in all seven of them?

A. No.

Q. Did you ever see washing machines——

A. I have stepped in the ditches.

Q. Have you ever seen washing machines in them?

A. No.

Q. Do you know whether they have washing machines?

A. I have no idea.

Q. So the process waste or process liquids are dumped into the pipe out of the plant operation.

A. These are discharged as a steady flow. There is no dumping.

Q. Steady flow?

A. Right.

Q. That is around the clock?

A. Twenty-four hours a day.

Q. Twenty-four hours a day. The river water is put in there——

A. Twenty-four hours——

Q. [continuing]. Only to wash out the soap suds.

A. Twenty-four hours a day.

Q. Twenty-four hours a day?

A. Right.

Q. Do the soap suds come down twenty-four hours a day?

A. I haven't watched that.

Q. But that is the only reason the river water is put in there?

A. No. It is put in there to keep the soap suds and any other solids moving to avoid problems with A-poly, the 24 inch concrete pipe.

The Court. Are you using "soap suds" to actually mean soap or just as a descriptive term?

The Witness. There is very little soap used today, Your Honor.

The Court. That is what I mean.

The Witness. What I mean is the suds that result from whatever detergent is used, whether it be soap or one of these other detergents, beer, possibly.

The Court. Beer?

The Witness. Yes.

Q. People use beer to wash their clothes in Jefferson Borough?

A. No, but they dump it in the gutter.

Q. On Defendant's Exhibit A, Mr. Johnston, is that the discharge pipe from the process carried on at the plant?

A. No longer.

Q. No longer?

A. That's right.

Q. Well, was it in August of 1970?

A. No.

Q. This map is not accurate as of August of 1970?

A. The map is accurate. The line is still there. That's all the map shows.

Q. Where is the indication on this map of the pipe that dumps the discharge from the process?

A. A continuous discharge comes through this 12 inch concrete line here.

Q. What is this pipe?

A. That pipe is a formerly used river water return line. You recall that we have a 12 inch suction line from the river, and this was returning that water. When it became so bad about six years ago we stopped using river water for cooling. We are now using a cooling water which requires a closed return system, and that pipe was abandoned but not removed.

Q. So that this pipe here is the one that indicates where the——

A. That's correct.

Q. And this indicates that the maximum capacity of that pipe is a thousand gallons per minute. Is that right?

A. Right.

Q. And that is to take care of the maximum that would be in the outflow?

A. At the time it was designed it also was carrying cooling water from process equipment which has now been changed over to cooling tower water, a closed system.

Q. And that is a 12 inch concrete pipe?

A. That is correct.

Q. Going into a 24 inch pipe which eventually goes into the river?

A. That is correct.

Q. That line operates pretty near capacity. I think your testimony was that 900 gallons per minute are pumped into that?

A. No, nothing like 900 gallons a minute. The flow that you show on your exhibit—I forgot the number——

Q. There is no flow shown.

A. Oh, yes there is. You can see the water coming over——

Q. You mean on the picture?

A. That's what I said, yes. You can calculate what that is.

Q. From the picture?

A. Yes.

Q. What was the figure 900 gallons per minute that I thought you testified to?

A. I don't believe I testified to 900 gallons per minute.

Q. I am sorry. My apologies.

A. We had an original capacity through that line of 900 gallons per minute, but at the present time as you can see from that photo, it is somewhat less than 200 gallons a minute.

Q. That is coming out of the pipe?

A. The 24 inch diameter concrete sewer.

Q. The A-poly.

A. No. That's the 24 inch diameter concrete sewer. Oh, you call it A-poly.

Q. That's what Mr. Lisanti calls it.

A. Yes.

Mr. THORNBURGH. No other questions.

By Mr. GONDELMAN:

Q. Mr. Johnston, in the present state of technology, is it possible for you to operate a water treatment facility, taking river water and going through your chemical process, so that the discharge into the river would be pure 100 percent water, pure water?

Mr. THORNBURGH. Objection, Your Honor. What is possible under the state of technology is not relevant.

The COURT. You mean by distilling it or something like that? I don't understand your question. You mean, is there any way that you could do that?

Mr. GONDELMAN. Under the present state of technology.

The COURT. Will you rephrase your question since I don't understand it.

Q. Mr. Johnston, can you so treat water, some of which comes from the river, some of which comes from the tap and some of which comes from your plant, so that the discharge through the sewers described here would be 100 per cent pure water?

A. No.

Q. If you were required to do so, could your plant operate at all?

A. No.

Mr. THORNBURGH. Objection.

The COURT. That's sustained. It has nothing to do with the problem facing this Court.

Mr. GONDELMAN. I have no further questions.

[Side bar conference.]

Mr. GONDELMAN. At this time I would want the clerk to take the blue folder which I have here containing, I think, all of the

exhibits which I referred to in the original offer yesterday relating to Mr. Johnston's testimony, they being the specific exhibits which would——

The COURT. We will take them and order them sealed.

[End of side bar conference.]

Mr. GONDELMAN. If the Court please, the defense rests.

The COURT. Any rebuttal?

Mr. THORNBURGH. No rebuttal, Your Honor.

Closing Argument by Mr. Thornburgh.

Mr. THORNBURGH. Ladies and gentlemen of the jury, we have now reached the end of this case and I want, first of all, to thank you for your patience during this trial. I am aware that that patience has been taxed by the frequent conferences that we have had with counsel and the Court, objections, arguing, alike. Let me assure you that it is nothing unusual in cases that are hard fought on both sides. Both Mr. Gondelman and myself have sought to insure that you decide this case only on the basis of proper evidence, and that is what most of the delays have involved. That is, getting the Judge to rule on disputed questions and of admitting evidence for your consideration. For the delays, I am sure Mr. Gondelman and myself both apologize, but please understand that it was in terms of getting before you only that evidence which is competent and relevant in making your determination in this case.

Once again I have to remind you in my closing remarks I will be stating my best recollection of certain facts and evidence which you have heard. If I misstate a fact, you disregard it because it is your recollection that counts and not mine. You will receive your instructions on the law from Judge Teitelbaum, so no portion of my remarks should be considered on that score either.

I told you at the beginning of this case that it was not a very complex case. Now that you have heard all of the evidence I think I can still say to you that this is not a very complex case, that the important facts which the evidence points you to are clear and uncontradicted. I want now to take this opportunity to review those important facts with you so that they will be uppermost in your minds as you deliberate in this case.

You have heard that the Defendant, Pennsylvania Industrial Chemical Corporation, operated a manufacturing establishment in August of 1970 in Elizabeth Borough in Allegheny

County, where they manufactured various petrochemical resins based upon styrene, endene and other hydrocarbons. Clear and uncontradicted in this process a million pounds of soda ash per year is used, about a million pounds of caustic per year, about a half a million pounds of sulphuric acid per year and about eight thousand pounds of aluminum chloride per day. Also clear and uncontradicted, the waste from this operation after some treatment, to be sure, is eventually dumped into the Monongahela River through two discharge pipes owned by Pennsylvania Industrial Chemical Corporation and designated by them as the A-poly and the B-poly discharges. All of these facts were testified to by Mr. Lisanti, the paid consultant who PICCO hired to deal with their industrial waste problem.

You did not hear, I might add, any evidence that indicated that these discharges from either of these pipes were made up of Kaopectate or table salt or Miracle White, as the Defendant might suggest on the basis of the testimony yesterday of the Defendant's chemist, Mr. Helwick, and some of the tests that he stated he conducted over last weekend. In the final analysis, I think and I suggest to you, all three chemists, Mr. Watts, from the Allegheny County Bureau of Tests, Mr. Lisanti, and Mr. Helwick from Chester Engineering, in effect, all agreed that these discharges that were sampled were industrial wastes. Although the company's chemist said that those from one pipe, the A-poly pipe, might possibly contain household waste as well, there are other facts in this case that admit a little doubt.

It is uncontested that on August 7, 1970, David Nixon and Dr. John Zavodni, in the course of making a survey of river pollution, pulled their canoe alongside the A-poly discharge pipe, only they called it discharge 230. They took samples of that discharge being dumped out of the A-poly pipe and similar samples from the B-poly pipe, which they called sample 231. You will also recall that on August 19, 1970, two weeks later, Mr. Nixon and this time Thomas Young, a student of his, pulled alongside the discharges again and they repeated their sampling to provide two more samplings from these sources being dumped into the Monongahela River. Finally you will recall all of the samples were turned over to and analyzed by Michael Watts, Bureau of Tests, Allegheny County. Mr. Watts' analysis finally was turned over to the United States Attorney's Office and formed the basis of this case. Let's

look again at what those charges were and how Mr Watts' analysis bears them out

Count number one relates to sample 230–1 and charges PICCO with discharging iron, aluminum, chlorides and solids into the Monongahela River on August 7, 1970. Mr. Watts' analysis shows us that the sample contained, in fact, 0.4 per million of iron, 40.4 per million of aluminum, 20.0 parts per million of chlorides, and 12,898 parts per million of solids. That is what sample No. 230–1 contained in the Government's charge, count number one.

Count number two relates to sample 230–2 and charges PICCO with discharging iron, aluminum, chlorides, phosphates, sulphates and solids into the Monongahela River on August 19, 1970. The same discharge as count one, but a different date. Mr. Watts' analysis as set forth on Government's Exhibit No. 10 shows as follows: Iron, 1.2 parts per million; aluminum, 98.4 parts per million; chlorides, 132 parts per million; phosphates, .2 parts per million; sulphates, 270 parts per million; solids, 1,068 parts per million. That's count number two, August 19, 1970, at the discharge labeled 230–2 or the A-poly line. Try to keep those in mind.

Count number three relates to sample 231–1. That is the second line, the 6-inch pipe, the B-poly line, if you will. It charges PICCO with discharging iron, aluminum, chlorides, sulphates and solids into the Monongahela River on August 7, 1970, the first day the samples were taken. Mr. Watts' analysis shows us that the sample contained, in fact, iron, 1.4 parts per million; aluminum, 41.8 parts per million; chlorides, 36 parts per million; sulfates, 3,206 parts per million; solids, 28,782 parts per million. That's count number three, sample 231–1.

Finally count number four relates to sample 231–2, August 19. It charges PICCO with discharging iron, aluminum, chlorides, phosphates, sulphates and solids into the Monongahela River on that date. Mr. Watts' analysis of sample 231–2 shows us that the sample contained, in fact, iron, 2.2 parts per million; aluminum, 83.6 parts per million; chlorides, 540 parts per million; phosphates, 10.5 parts per million; sulphates, 9,768 parts per million; solids, 46,832 parts per million.

Ladies and gentlemen, I would submit that the charges filed by the Government find ample support in Mr. Watts' analyses. Let's remember back that Mr. Nixon and Dr. Zavodni also took one other sample on each day, August 7 and August 19,

so-called midstream samples 511–1 and 511–2. You may wonder why these were referred to at all in this case and I want to clear that up now. I will tell you that they were introduced into this case only to show you that in no case did the Government file charges with respect to substances being discharged into the river which were quantitatively less than what the river samples show the river already to contain. Although Mr. Watts' analysis of sample 230–1 showed 262 parts per million of sulphate to be contained in that discharge, the river sample that was taken on the same day, that is, at 511–2, shows that 267 parts per million of sulphate were present in the river, and there was no charge with respect to the discharge of those sulphates.

On the other hand, Government's Exhibit No. 12, being sample 231–2, showed sulphates of 9,768 parts per million being discharged from the B-poly pipe, while at the same time the river level was 258.4 parts per million, and the charge was included within the information filed against PICCO. These river samples, of course, obviously form no part of the charges and are not evidence of PICCO's violation of the Act.

On the basis of all of the other evidence produced, however, you must now decide, under Judge Teitelbaum's charge, as to the law. He will instruct you as to that, whether or not with respect to each of these four charges Pennsylvania Industrial Chemical Corporation is guilty of—in the words of the Act, and I am quoting, discharging refuse matter into what we have agreed is a navigable water of the United States. You have, through the testimony that has been adduced by the Government in this case, more than sufficient ingredients to make that determination.

As to matters of defense, let me anticipate as best I can what matters will be raised by Mr. Gondelman in his closing remarks to you. You have heard from time to time during this case frequent mention of permits to discharge and their bearing on this case is an important one. I expect that Judge Teitelbaum will tell you that discharges of refuse which would otherwise violate the law are permitted if and only if the dumper obtains a permit from the Corps of Engineers before he begins to discharge the refuse in question. We have no such case here. No such permit was issued with respect to the discharges of August 7 or of August 19. In fact, Mr. Johnston, the vice-president of PICCO, testified that he did not even

apply for a permit to discharge on either August 7 or August 19, and you do remember his reason. You remember that he said that in 1949, twenty-one years earlier, a man whose name he can't remember, a functionary in the Corps of Engineers, an associate engineer, I think he said, had told him it wasn't necessary. Well, I don't know whether PICCO was dumping anything into the river in 1949. Mr. Johnston testified the plant didn't even start up until seven years later, in 1956, so the engineer's advice might have been right, for all we know, but in any event, I suggest to you that to have relied on this supposed unofficial clearance given some twenty-one years later was no excuse for not seeking a permit clearly required by the law and, of course, it provides no defense to the charges in this case, but you have also heard this matter of permits is even more serious. It seems nobody pays attention to the law. You heard Mr. Dore of the Engineers testify that no permits had been received by his office from the Ohio River basin for discharges into navigable waters up until 1970. I ask you to remember, and I think the Court will instruct you that this Act, the Refuse Act, puts the burden on persons discharging refuse to seek and apply for a permit. It does not require the Corps of Engineers to ask for or solicit or search out those persons who might have to apply for a permit. With this in mind, I ask you is it any wonder with this kind of attitude that the Federal Government has of late undertaken an aggressive program to shut down discharges of industrial refuse into our rivers? If anything, this action is long overdue, ladies and gentlemen of the jury. It is long overdue.

There is one final matter I would like to get into before I close. Mr. Gondelman, during his cross-examination of Mr. Nixon, Dr. Zavodni and Mr. Young indicated that he might ask you to disapprove of their activities because the law gives them a chance to share in whatever fine might be collected from his client if you return a guilty verdict. He suggested that they were, in effect, bounty hunters. If he does ask you to disapprove their actions in his summation, I only ask that you consider very carefully this insinuation. These men, to be sure, had a motive in their activities, but it was not money. It was put simply and eloquently by Mr. Nixon. He said, "No, we weren't in this to make money. It was just our small way," he said, "just our small way to help clean up the rivers," and so it was then, and these two young teachers, Mr. Nixon and Dr.

Zavodni, and their student sidekick, Thomas Young, a Marine Corps veteran just back from Vietnam, deserve your fullest concentration on the results of their efforts which have been put into evidence over this past week. I am sure that you will give that evidence that kind of concentration.

So there it is, ladies and gentlemen. That's the Government's case. I want you to pay particular attention, even more so than to my remarks, to Judge Teitelbaum's instructions to you on the law. Consider all the evidence, and if it convinces you of guilt beyond a reasonable doubt, have no hesitation in finding Pennsylvania Industrial Chemical Corporation guilty on each of the four counts charged.

Thank you for your patience and for your attention.

[Side bar conference.]

Mr. GONDELMAN. I must ask Your Honor's indulgence in a matter which I overlooked and ask that I be permitted to incorporate a motion for judgment of acquittal which I neglected to do right after I rested.

The COURT. Under the rules you can make it just as well within the next seven days. There is no penalty.

Mr. GONDELMAN. I just wanted to have it on the record.

The COURT. I looked it up when I realized you had not done it. I think it is too late now. I looked it up.

Mr. GONDELMAN. I wanted to make sure I got it in as soon as I realized it.

The COURT. I don't think I can allow you to make it now, but I don't think you are hurt by it.

[End of side bar conference.]

Mr. GONDELMAN. Ladies and gentlemen, I, too, appreciate your attention in this case. Sometimes you wonder what we are doing. Sometimes I wonder what I am doing. Sometimes perhaps Mr. Thornburgh wondered because I think it is obvious to you that we are pioneering for there is not much precedent for what we are doing here and we are trying to get the law to you as we understand it. I will offer our evidence and present our case as fervently as I can for a client whose case is heard in Federal Court or any court because I think every case tried before a jury is an important case in the administration of American justice. I don't think any case where an injustice is done does anything but erode what is going on in the country and the world, and that is the right of people to live.

This is not a pollution case. I know you can't decide cases in a vacuum and you know there is all this talk about pollution. We are not being charged with polluting. This is a criminal case, something Mr. Thornburgh seemed not to tell you very much about. PICCO is charged with having committed a crime against the United States Government, United States of America. As such, the Government of the United States, under our system of justice, has the burden of proving each and every element of this offense beyond a reasonable doubt. That is sufficient for a defense, to create a reasonable doubt. We haven't just done that, but I want you to remember where the shoe stays throughout trial. The burden rests on the Government. The Defendant does not have to prove anything in the United States of America. In this country every defendant is presumed innocent until proven guilty by evidence which convinces you of that guilt beyond a reasonable doubt. We are not trying a pollution case. We are not trying an injunction. We are not trying a case to stop pollution. We are trying a criminal case brought, remember, under the Act of March 3, 1899. His Honor, Judge Teitelbaum, has the duty of explaining the law to you.

I submit to you, ladies and gentlemen of the jury, that you have the duty of sitting in a jury box later in the jury room and deliberating on a case with the law as it is given to you and with your own common sense and experience in applying that law. I told you when I opened that the Government and the democracy of the United States will exist so long as twelve people can retire to a jury room and bring in the verdict that makes sense under the facts as they are presented to you. I submit to you a verdict of guilty in this case would make absolutely no sense for the reasons that I will now go into.

First of all, there is no question in this case—and we could have shortened it considerably—we did. I offered to stipulate that the samples that were taken from the two pipes came from PICCO's plant. I stipulated that the chemical analysis of what is in those pipes is accurate, but remember this, you cannot, as Mr. Thornburgh did in his closing, compare river water in midstream—and every expert in this case so testified—to any sample that is taken from the PICCO plant because every expert told you that this analysis comes only after the rate of flow and the amount of water in midstream is known, and to make that analysis with what is taken directly from the discharge put into the stream you must know what the river flow

is and how much water there is going into it because it could approximate what is in midstream already, but at least the experts told you that you can't compare apples and oranges, and that's exactly what this is, and it is not even of the fruit family.

You will remember Mr. Watts. I said, "Can you compare 231–2 with 511–2?" He said, "Oh, no, you can't make that comparison. We are not offering this for a comparison," and you can't compare it because when that water goes into the river, without knowing the rate of flow and the amount of water—you heard the examples. If you put it into a small non-moving stream, certain things might be refuse, where if you put it into a fast moving stream, it wouldn't be refuse, so that I submit to you you cannot, when you go back to the jury room, say that what comes out of the discharge sewers of PICCO's plant stays in these quantities that you have here.

There were two other matters that I had to show you in order to make sure that you understood. I realize you are not chemists and I am not. When you take a look at some of the figures on here as to what is total solids, you might think that looks like a solid even though it is 46,000 pounds in one million pounds of water. Here is a total solid of 12,898. It might look impressing to you. Take the Defendant's exhibit. I didn't introduce this to insult your intelligence by showing you that salt will dissolve in water. Of course not. I introduced this to show you that this fluid in this jar contains 20,000 pounds of solids per one million gallons of water. That's what that exhibit shows you, so that you would have some ability to relate what is shown on these exhibits because, ladies and gentlemen of the jury, these exhibits have to be understood in their context. This exhibit does not show that there was 40,000 pounds of aluminum—if this is aluminum—pieces of aluminum in water. This exhibit shows you that there was added to water aluminum chloride, incidentally, a substance used in the treatment and purification of water, which we are charged with dumping into the river. Aluminum chloride is like sodium chloride. It is a salt. It dissolves.

When you look at this you find aluminum as if it is something separate. It is aluminum chloride and this exhibit is simply to demonstrate to you that when you talk about these substances you must understand what they look like in water because that's what we are talking about. I submit to you 20,000 pounds of

aluminum chloride, sodium chloride, any chloride, is a liquid state discharge and affects in no way the Monogahela River other than help clean it up some, because many of the matters that Mr. Thornburgh talked about, soda ash and caustic, are all used in cleaning up water.

Mr. THORNBURGH. I object to that. There is no evidence in this case that those substances are used to clean up water. Mr. Gondelman's testimony is not admissible.

Mr. GONDELMAN. Aluminum chloride is being used in water treatment plants.

Mr. THORNBURGH. He said many of the things I talked about like soda ash and caustic are used to clean up water.

The COURT. Let's limit it to aluminum chloride.

Mr. GONDELMAN. As we all know, Government's Exhibits 1, 2, 3, 4, 5, and 6 are photographs taken at my client's plant. We also know that the act under which Congress, in its infinite wisdom, in 1899—remember, we are trying, in 1971, to interpret what Congress in 1899 had in mind. Just think back. You don't decide a case in a vacuum, I told you. You decide it in the light of your own experience. In the lifetimes of all of us what has this country come from and to? It has gone from an agricultural community in 1899 to a highly industrial community in 1971. We are trying in 1971 to imagine what President McKinley and Congress had in mind, and to think that they were so bright and so clairvoyant that they could anticipate what this country would develop to and then pass a law that says that you shall not dump or throw or discharge or deposit refuse, any refuse matter of any kind of description whatever. I submit to you that you decide in 1971 in light of the industrial development of this country when you try to apply it to this Act, and remember, too, that it says—the Government hasn't yet told you that—"Any refuse matter of any kind or description whatever"—I am quoting from the Act of 1899—"other than that flowing from streets and sewers and passing therefrom in a liquid state."

It is my recollection—it will be up to you to remember it—I think perhaps Judge Teitelbaum remembers it differently. If he does, it is still your recollection. It is my recollection that everybody agrees—and I really don't see how anyone could disagree—that the matter flowing from this box in Government's Exhibit 6 is in a liquid state. It is certainly flowing in a liquid state. There is no question that Exhibit 3 shows ma-

terials flowing in a liquid state. Mr. Watts testified that the matters which he examined were in a liquid state. That is item number one.

I believe it is incumbent upon the Government to prove that this matter is not flowing from sewers and not flowing in a liquid state. Everybody agreed that these were sewers. The witness Lisanti, I believe, when the Government called him, testified that these were sewers. Watts, I think, testified they were sewers. I may be mistaken there. Everyone testified that they flow in a liquid state, so item number one, the Act says that you shall not discharge refuse—I don't know what refuse is. The Judge will explain it to you and you see if you know what refuse is. The Act says that you must not discharge refuse into navigable waters—no question about the Monongahela River being navigable—except that flowing from streets and sewers in a liquid state.

What is a sewer? A sewer—and you have to use common ordinary definitions. There is nothing before you that makes us think that Congress in 1899 defined sewers other than what Webster defines a sewer. Webster defines "sewer" as: "An artificial, usually subterranean conduit to carry off water and certain waste matter." Remember, this is a criminal case and therefore you must take, and I think Judge Teitelbaum will tell you, you must construe the statute and the words of the statute narrowly. You can't give them a broad and wide meaning. You must construe them as they are written. Black's Law Dictionary also defines a sewer. It says, "An artificial, usually underground or covered, channel used for the drainage of two or more separate buildings." There is testimony that there are more than two buildings on this property. I think, in fact, the Government's exhibits will show you that there are more than two buildings on the property, so you have sewers carrying water. We challenge the fact that there is waste material in it—for reasons which have been explained to you—through sewers discharged into a navigable water. The Act says that if it is carried from a street or a sewer and passes in a liquid state it is excepted from the operation of the Act altogether.

Mr. Thornburgh attacked Mr. Johnston's credibility on the fact that someone in the Corps of Engineers told him in 1949 that you did not need a permit to discharge water into the Monongahela River. I submit to you that there is ample corroboration of the fact that that's what the Corps of Engineers

would have told anybody. From 1899 until 1970, if you operated an industrial plant and discharged materials into a navigable stream, the Corps of Engineers would have told you that you don't need a permit.

Mr. THORNBURGH. I object to that, Your Honor. There is no such testimony in the record and I don't think that Mr. Gondelman should refer to things that are not in evidence in this case.

Mr. GONDELMAN. I tried not to interrupt Mr. Thornburgh, but the fact is I can argue every inference from the facts and testimony that I choose to argue, and I am arguing the inferences from Mr. Dore's testimony.

The COURT. I will cover that in my charge. I trust you have concluded that part of your argument.

Mr. GONDELMAN. Ladies and gentlemen of the jury, let's look at the exhibits and decide what the Corps of Engineers' attitude was. I have produced in evidence Exhibit G. Now, the permit that they are talking about, the permit that we are charged with not having because we couldn't get a permit, they say, is a permit to discharge refuse, whatever that is.

The COURT. Mr. Gondelman, I don't think there is any evidence that you couldn't have gotten a permit. There is evidence there were no forms and that none were issued.

Mr. GONDELMAN. I want the jury to look at an exhibit. How can I get the——

The COURT. Don't shout at me. I don't think there is evidence that you couldn't get a permit. There is evidence there were no permit forms. There is evidence that no permits were issued.

Mr. GONDELMAN. If the Court please, all I want to argue from Exhibit G is the fact that when the Corps circulated——

The COURT. You may argue that, but——

Mr. GONDELMAN. May I do that, Your Honor? May I argue from Exhibit G? That's what I just said I was going to do.

The COURT. You go ahead, but argue in a proper fashion.

Mr. GONDELMAN. I have tried, and if I haven't, I am sorry that you and I disagree.

I want you to look at Exhibit G. This is not an exhibit of the Defendant. This is an exhibit issued by the Corps of Engineers, United States Army, Office of the District Engineer, Pittsburgh District, 925 New Federal Building. This is not something that we manufactured. It is something the Govern-

ment sent out. I am not going to argue much about it. All I am going to ask you to do is to please look at this exhibit carefully and find out how much a permit would have cost to discharge refuse into the river. The reason I ask you to do that is that there is not a word on these two exhibits indicating fee schedules for permits, which shows that there is a fee schedule for a permit to discharge matter into the river, and the fact is that Mr. Dore did testify that in thirty-one years he does not know of a single instance where an industrial plant had requested a permit, he does not know of a single instance where the District Corps of Engineers issued a permit, and he does not know that there was in existence any application forms for a permit. That is something for you to consider as to whether or not a permit was clearly required by law for thirty-one years, at least. This is the Act of 1899. You figure it out. I don't think anybody is around whose memory will go back that far, but we certainly know from Mr. Dore, who was in that Engineers' office—the District Engineers covers 25,000 square miles, the Allegheny and the Monongahela Rivers and some of its tributaries. For thirty-one years in this country nobody has asked for a permit to put anything into navigable rivers and no permits were issued and no forms were there, and then suddenly in 1971 a Defendant is brought before you, not to ask him to stop doing what he is doing—there are reasons for that, I guess—but to have a jury of twelve convict that company of a crime, despite the fact that in thirty-one years it had never been done by the Corps or by anyone else. I submit to you that your common sense must apply because remember what I told you about a jury in a Federal Court or any court. What you decide—and you can't decide this case and say, "Well, that's a corporation. We don't have to worry about that." If you let the Government of the United States go along for thirty-one years without doing a thing in connection with a law that was passed in 1899 in an entirely different era come before you and say now, "Convict that corporation," I submit to you that what you are doing is eroding the sense of fair play and the sense of justice that has caused this country to proceed as it has through almost now two hundred years because when does it then come to the individual? See, you can't just sit there and think in terms of an individual, "They should do this." Remember, Mr. Johnston testified that it is technologically today impossible to take water out of a river, use it in a plant and then

discharge pure water into the stream. You think about the consequence of that. Will they go out of business? What happens? There is a balance here. There really is a balance between economy and ecology, and we have to argue ecology because it is all through the case and nobody has been able to talk about it.

We are charged with dumping refuse. We haven't gotten into what is pollution, what are pollutants, and as to the refuse and to the discharge of refuse, it is technologically impossible to remove all refuse from water in this broad interpretation. I submit to you when you interpret you must interpret it as it would have been thought of in 1899. I don't know how you are going to do that, but I suggest you must. I suggest you might interpret that Act as it was written as it applied to the economy as it existed and as has been applied by the Government of the United States for seventy years by not having applications or issuing permits, nor were they asked for, nor did any industry ask for them. You can ask yourselves why.

No one says it was clearly required by law. Mr. Thornburgh said in his closing that it is clearly required by law, so clearly required by law, according to his argument, that for thirty-one years not one has been asked for or delivered or sought by the Corps of Engineers. Is that clear to you?

In this country it has been the law that when you charge a person, corporation or anybody else, with a crime, that crime must be clear and definite, and it must be applied by the Government of the United States in a manner that is fair and equitable and just, and not seventy-two years later suddenly come in with a charge of a criminal violation of an Act that they have not sought to enforce for seventy years. I suggest to you, under the circumstances of this case, you have two ways in which you should acquit the Defendant of all four charges. One is this. The discharge from the plant is from a sewer in a liquid state. If that isn't a liquid state, I don't know what is a liquid state. Every expert testified so. These are sewers as defined by every dictionary you will look it up in. An underground conduit for the discharge of water and waste material. If this is waste material and it is flowing in a liquid state, it is excepted from the Act which says "Except for that flowing from a sewer in a liquid state."

Number two. I suggest to you that by the conduct of the Government of the United States itself, a conviction in this case

would be a blow to the administration of justice in this country. For twenty-two years I have practiced law as believing that we in this country really mean it when we say that we will proceed to justly and well apply laws to people equally, apply laws to people equally. In seventy-two years you have one Defendant charged in a criminal case——

Mr. THORNBURGH. I object to that, Your Honor. That is contrary to the evidence.

The COURT. There is no evidence as to that. That is contrary to the fact. The jury will ignore that.

Mr. GONDELMAN. In this district here, if the Court please, there have been no applications.

The COURT. Yes, but there have been other charges.

Mr. GONDELMAN. Not in these instances.

Mr. THORNBURGH. There have, and you know it.

Mr. GONDELMAN. Yes, there have been four brought, all at the first time.

The COURT. There have been other charges brought. That has nothing to do with the case. I don't want you to argue it.

Mr. GONDELMAN. There have been no applications in the office of the District Corps of Engineers for thirty-one years. Nobody has asked for an application. If they asked for one, there wasn't one. I suggest to you on that basis that your common sense and reason must indicate to you the unfairness in that. I am sure Judge Teitelbaum is going to tell you that whether there are permits, whether there aren't permits, doesn't make any difference under the law. If they make any difference to you, common sense and reason—does it make any difference to you when the Government is charged with the burden of proving a violation that a discharge occurred? I suggest to you that you must know that you are violating the law or at least the law must be violated knowingly, and yet no one in this district, 25,000 square miles, for thirty-one years has had the applications or asked for the applications. I think when you use your common sense and reasoning in that connection you will find that such a prosecution is unfair and unjust. There is no reason to try to convict a corporation of a crime in connection with what it is placing into a river if it has no effect on the ecology, and there is no evidence as to whether it does or not, so you can't really consider whether what is placed in the river has any effect on the ecology, except that Mr. Johnston did testify that what was placed in the river met state standards. You have that to go

by, and if it met state standards—he so testified in cross-examination by Mr. Thornburgh. He said specifically that he believed what the Defendant PICCO discharged into the river, he said, was not refuse. These are almost his exact words. He said it was not refuse because what was discharged in the river complied with state standards. I submit to you that that ought to mean something to you because he did so testify several times. This morning he, I think, testified again. Judge Teitelbaum will tell you whether it complies with state standards is not very important to you. I again say it is important for you to consider the fact that it does comply with the state standards. All of us are worried about ecology. It is difficult to try a case in an atmosphere that is permeated with an anti-pollution air that we are in now and everybody agrees with. I have to try to convince you that in this case an archaic statute does not apply in the fact situation before you. One way, I submit to you, to use your common sense and reason is for you to consider that if it does comply, as testified and as uncontroverted, if it complies with the state standards then it is really not a pollution case. It is simply a case charging the violation of an act of 1899 which prohibits the discharge of any refuse matter of any kind or description whatever. I think you can determine what the effect of that would be on the economy. You can determine whether or not if under technology today you cannot discharge pure water from mills, whether mills can operate and whether you want that. There must be a harmonious balance in this country, and we will reach it, where ecology will be implemented and the state standards are met, Federal standards are met, as opposed to the economy and the alternative of shutting down every plant that operates in this country.

Mr. THORNBURGH. I must rise to object to that, Your Honor. There is no evidence that such an horrendous result would occur in this case.

The COURT. If you want rebuttal——

Mr. THORNBURGH. Yes, I do.

Mr. GONDELMAN. I thank you, members of the jury. Obviously, I am finished. Mr. Thornburgh wants to say a few words.

Mr. THORNBURGH. I am not possessed with Mr. Gondelman's eloquence, ladies and gentlemen, but I like to think I am possessed with a little of the common sense that he is asking you

to exercise. For that reason I want to speak on just two or three points that he has made.

He has indicated to you that there is something sinister about enforcing an act which was put on the books in 1899. I suggest to you that we have endured and survived and prospered in this country with a Constitution that was put on the books over a hundred years before that, and there is nothing in the antiquity of a law that robs it of application or that requires you to disregard it simply because it is seventy-two years old. It is as fresh as today. It is as fresh as August 7 and August 19, 1970, when the Government charges this dumping took place.

Mr. Gondelman has suggested that perhaps these substances, this matter set forth on these charts here might well be a way of cleaning up the rivers. He has asked you to exercise your common sense. You exercise it in that regard because that kind of an argument, unsupported by any kind of evidence, is one that ought to be, in my mind, clearly excluded from your consideration. The idea of this Defendant making these discharges, hiring a consultant to deal with a water waste problem and then coming in to say, "Well, we were really just cleaning up the rivers," is patently ludicrous. Let me deal with the matter of so-called discharges in a liquid state from a sewer. Mr. Gondelman would have that read that anything that comes out of a pipe, in a liquid state cannot be refuse under the Act of 1899. Judge Teitelbaum will tell you what a sewer is, and it isn't just a pipe, and when we talk about the the liquid state, use your common sense again and ask yourselves, did Congress mean that only when you shoveled refuse into the river or dumped it in with a crane or drove a truck up to the river and dumped in solids, was that when you were violating the Refuse Act, or could you also violate it by having those solids—and you will remember the amounts of solids set forth on those examples—mixed in with a liquid discharge. Again I invite you to listen very carefully to what Judge Teitelbaum charges you with respect to this very limited exception to the 1899 Act.

With respect to the permits, it was my questioning that brought from Mr. Dore the fact that there had been no applications granted to anyone and no applications made for permits. I did that to show you that a law that clearly says that before refuse is dumped in a navigable water you must obtain a permit has been flouted ever since its passage in 1899 in this dis-

trict. Ask yourselves why, with a record like that, the Government has brought these criminal charges against this Defendant and others. The law is not made by the United States Attorney. The law is not made by the Corps of Engineers. The law was established by the Congress of the United States, yours and my representatives, in 1899, and it is as good today as it was then. You need only apply that law under the instructions that Judge Teitelbaum gives you. There is no burden on the Corps of Engineers to go around and shake the trees to determine who might need a permit. The Act puts the duty on the person who is doing the dumping to seek the permit, and no one has sought them and the time for in-action is over, ladies and gentlemen of the jury. It is later than you or I think.

Mr. GONDELMAN. I object to that argument, Your Honor. What Mr. Thornburgh or anybody else thinks is not evidence. This is not a pollution case.

The COURT. There is not going to be any surrebuttal, thank you.

Mr. GONDELMAN. It is improper argument.

The COURT. I think you provoked the argument by talking about ecology and by suggesting that my charge, whatever it might be, should be disregarded to those extents.

Mr. GONDELMAN. I take exception, of course, to those remarks at this time, too.

CHARGE OF THE COURT

Ladies and gentlemen of the jury, you have heard the evidence in this case and the arguments. It now becomes my duty to give you the instructions of the Court as to the law applicable to the case. You will recall that I gave you certain preliminary instructions at the outset of the case which were intended to guide you through these proceedings. I am now going to provide you with further instructions which I deem important to your deliberation. I will, undoubtedly, repeat certain instructions which I gave you earlier. That is merely because I feel that it is essential that you hear those at this time. You are not to single out any one instruction as stating the law, but you must consider the instructions as a whole. Neither are you to be concerned with the wisdom of any rule of law as I state it to you. It has been suggested to you in closing argument that I might charge in certain ways, but that you

should be governed by certain other things. If you do that, you would be false to your oath. Your oath is to take the law as I give it to you without questioning whether it is a proper instruction or it isn't. You are to take the law as Congress has passed it without any question as to whether they should have passed it or not. That is a matter that neither you nor I can control. When a law is passed, that is the law and we must take that law as it is given, and any opinion that you might have or I might have as to the law, what the law ought to be, is not for you to consider. I say again, it would be a violation of your sworn duty to base a verdict upon any other view of the law than that which I give you in these instructions, just as it would be a violation of your duty to decide it on something besides the evidence which has been produced in this case. The administration of justice in this country, through trial by jury, must always depend upon the willingness of each individual juror to seek the truth from the same facts and evidence and apply those facts to the rules of law as given by the instructions of the Court.

You have been chosen and sworn as jurors in this case to try the issues of fact presented by the allegations of the information and the denials made by the not guilty plea of the accused. You are to perform this duty without bias or prejudice as to any party. The law does not permit you to be governed by sympathy, prejudice or public opinion. Both the accused and the public expect that you will carefully and impartially consider all the evidence in the case, follow the law as I give it to you and reach a just verdict regardless of the consequences. It is not for you to speculate what the effect of enforcing the laws of the United States would be. It isn't for me either. We must enforce them. You must not be concerned as to what the sentence might be if a guilty verdict would be returned because that is for me to determine and that isn't a part of the duty of the jury.

You will recall that the information in this case is in four counts. The different counts deal with two sources of discharge, each on two separate dates. I am going to outline these specific charges to you by reading them to you, but I wish to say this. Counts one and two refer to a concrete pipe of which you have heard and to discharge on August 7 in count one, August 19 in count two. As to counts three and four, they refer to a flow from an iron pipe, count three on August 7, count four on August 19.

The charges are as follows: Count One. On August 7, 1970, at approximately 2:02 p.m., in the Western District of Pennsylvania, the Defendant Pennsylvania Industrial Chemical Corporation, a Pennsylvania corporation, did unlawfully discharge and deposit from the shore and from its manufacturing establishment situate along the Monongahela River in West Elizabeth, Allegheny County, Pennsylvania, and from a concrete pipe approximately two feet in diameter, at approximately river mile 23.7 of the Monongahela left bank, certain refuse matter, to wit, iron, aluminum and compounds containing these chemicals, and chlorides and solids into the Monongahela River, a navigable water of the United States, in violation of Title 33, United States Code, Sections 407 and 411.

Count Two is essentially the same except that the date is August 19, 1970, and the time is 3:23 p.m.

Count Three provides that on August 7, 1970, at approximately 2:07 p.m. in the Western District of Pennsylvania, the Defendant Pennsylvania Industrial Chemical Corporation, a Pennsylvania corporation, did unlawfully discharge and deposit from the shore and from its manufacturing establishment situate along the Monongahela River in West Elizabeth, Allegheny County, Pennsylvania, and from an iron pipe approximately four to six inches in diameter discharging effluent into a small wooden settling block from which water and refuse matter were discharged, at approximately river mile 23.7 of the Monongahela River, left bank, certain refuse matter, to wit, iron, aluminum and compounds containing these chemicals, and chlorides, sulphates and solids into the Monongahela River, a navigable water of the United States, in violation of Title 33, United States Code, Sections 407 and 411.

Count Four charges essentially the same thing except that the date is August 19, 1970, and the time is 3:39 p.m.

Counts One and Two deal with the discharge from the two foot concrete pipe on August 7 and August 19, 1970 respectively, and Counts Three and Four deal with the discharge from the four to six inch iron pipe on August 7 and August 19 respectively. You must consider each count of the information separately, and, based on the evidence concerning it, reach your verdict. Each count is a separate charge and each must be considered by you separately.

Of the two sections of the United States Code which are involved, Section 407 provides in its pertinent part that it shall

not be lawful to discharge or deposit from a manufacturing establishment any refuse matter of any kind or description whatever other than that flowing from streets and sewers and passing therefrom in a liquid state into any navigable water of the United States or into any tributary of any navigable water, from which the same shall float or be washed into such navigable water. It is provided that this section shall not be violated if the Secretary of the Army has permitted such deposit of any material above mentioned in the navigable waters. Unless, of course, a permit was granted, which it wasn't, it is violated.

Section 411 of Title 33 provides in its pertinent part that every person and every corporation that violates Section 407—that is the one I just read to you—shall be guilty of an offense against the United States. Then we must consider what the elements of the offense are. The first element, that the Defendant discharged and deposited from its manufacturing establishment any refuse matter of any kind or description; two, that it was discharged and deposited into any navigable water or any tributary of any navigable water from which it shall float or be washed into such navigable water; and three, that the refuse matter is not flowing from streets and sewers and passing therefrom in a liquid state.

I must therefore define certain of these terms to you. First, it has been stipulated that the Monongahela River at the sites of discharge alleged in this case is a navigable water of the United States. Therefore you need not be concerned with whether or not it is navigable. It is agreed that it is, and that's it.

The controversy in part centers around the term "refuse." The definition of this term is a simple one. "Refuse matter of any kind or description whatsoever" encompasses all foreign substances and pollutants. It includes industrial waste of any kind and particularly solids. That is, particles in suspension as opposed to particles in solution. When a matter is in solution it is completely dissolved as the salt that was put in the water dissolved. If something is in suspension, the tiny particles are still there. They are not dissolved. They may even be too small to see, but they are still there. They are not dissolved into the solution.

The excepted refuse matter—in other words, the statutes, you will recall, except certain refuse matters. The excepted matter is that which flows from streets and sewers and passes therefrom in a liquid state. This means purely and simply, sewage.

Sewage is matter carried away in sewers. That is, water, filth and feculent material. Generally, sewage derives from human and domestic waste. It does not include industrial waste or discharge, especially those containing suspended solids. The mere fact that something flows in water does not make it in a liquid state. You cannot pour industrial waste into water and have it carried into a navigable stream and then contend that it is excepted because it is in a liquid state. What we are talking about is that refuse which I have just defined to you, water, filth and feculent matter which generally comes from human or domestic waste.

There has been a question of what a sewer is. A sewer really depends on the use for which a particular conduit is made. That is what determines whether it is a sewer or not, and not the construction of the conduit. For example, an iron pipe can be used to carry wires and that doesn't make it a sewer. You will recall that a conduit can be used for all kinds of purposes. It is the use which determines whether it is a sewer or merely a pipe. For example, you know, too, a pipe can be used to carry water to your home. That doesn't make it a sewer. A sewer means generally an underground conduit for fluid and feculent matter usually from houses and includes surface water, waste water and waste matter. The purpose of the sewer is to carry off such surface water, waste water and waste matter to another place for discharge.

One of the elements of this offense, as defined by this statute, is that it must have been committed unlawfully. I think the word is "not lawful." This simply means acts done knowingly and intentionally and with reckless disregard of the law. The Defendant must have known what it was doing and not have acted unintentionally in doing so. The Defendant need not, however, have acted with an evil or bad purpose, nor need there be any awareness that what was being done was in violation of the law. There is no contention in this case that this Defendant acted unintentionally or unknowingly. You will recall Mr. Johnston's testimony to the effect that the corporation knew of the discharge, but felt that they didn't need a permit. As I recall, he felt so because he said he did not consider that this was refuse. Whether he considered it refuse or not is not the important question. I have defined refuse to you as it has been defined by the law and you will have to accept that definition of refuse.

In that regard there are certain things which I have ruled in this case that you must not consider as relevant at all or consider at all in your determination. The Federal Government passed a law in 1899. How old it is doesn't make any difference. It is still on the books. It says that you cannot deposit in the navigable waters refuse matter, as I have defined refuse matter to you. Whether the deposit of such matters would of themselves have polluted anything or not has nothing to do with this case, nothing whatsoever, and I again say to you, if you pass on anything but the law as I give it to you, you are violating your duty. I agree that one drop of salt doesn't make the ocean salty, but if, on the other hand, the law forbids dropping salt in the ocean, you cannot drop it merely because you, in your own discretion, think that that wouldn't make it salty, so the effect on the ecology is not your concern.

Whether or not the Commonwealth of Pennsylvania had certain standards established, the reason for them establishing such standards, and whether or not this deposit would have violated them or not, is not of your concern. We are concerned here only with a Federal statute. You must determine only whether or not refuse, as defined by me, was deposited by this Defendant into some water which was carrying it into a navigable stream. I say to you again that the fact that forbidden matter is put into the water and carried into the stream does not make it in a liquid state. Furthermore, you were told that you must construe statutes strictly. It isn't your duty to construe statutes at all. It is my duty to construe statutes. All you do—not all you do. It is a very important task that you do. You determine the facts and then apply the construction of the statute as I give it to you.

There has always been a question as to bounty provisions. Congress, as a method of carrying out the enforcement of this Act, as they have done in other acts, provided a bounty or a reward for people who bring to their attention certain violations. The wisdom of that is not for you nor me to decide. Congress has said it is a policy of the United States to reward certain people under certain circumstances for bringing to their attention certain violations, and that is a method of enforcement. That is a method of obtaining the information necessary to carry out the law. You must not consider that at all in reaching your decision. Actually, you have no decision to reach as to whether they are going to get a bounty or not, get a percentage

of the fine, if such a fine is levied or not. That would be for me to decide under the appropriate circumstances.

Another thing I must charge you on is whether or not there were forms for permits, whether or not a permit was obtainable, has nothing whatsoever to do with this case. It is contrary to law to discharge these matters, as I have defined them to you, into a navigable stream without a permit, and if the Secretary of the Army in his discretion, decided not to give anybody a permit, so be it. It is not for us to decide that kind of an issue. The law says you must first get a permit, and if you don't get a permit you can't make such a deposit, and if nobody could get one for seventy years then nobody could lawfully deposit such matter into the river.

You are also certainly not to consider what the effect of enforcement of the law of the United States would be on industry or anybody else. If that has any bearing, it is not for you or me to decide. It is for the Congress or some person besides ourselves.

Also I instruct you that whatever instruction a person might get from an employee of the United States is not binding on the United States. The United States is not bound by what any employee tells them, so whether or not any person in the Corps of Engineers said a permit wasn't necessary, if he did say that, makes absolutely no difference. Ladies and gentlemen, if I should sit here and tell you that you can deposit a letter in the Post Office without an eight-cent stamp on it, I assure you that wouldn't cause that letter to go through the mails. The Government is not bound by what its employees say. It may be in certain kinds of circumstances, but not in anything with which we are concerned here.

Another thing that you are absolutely not to consider is whether there are other charges for similar acts against anybody else and what the results, the status of any such matters would be. These are matters which are of no concern in the search for truth in this case, which is all you and I are concerned with at this time.

I am not going to review all of the testimony in detail with you. I will briefly state the contentions of the parties. I caution you that if you think their contentions are something different than I think they are, accept yours and not mine because you and you alone are the finders of fact. The Government's contention, as I understand it, is simply that this Defendant

was discharging industrial waste or refuse into the Monongahela River. It contends that the Defendant knew what it was doing on the occasions here involved and it contends that the industrial waste included solid particles in suspension. The Government contends that this refuse was not sewage, as I have defined sewage to you, so that it does not fall under any exception.

The Defendant, on the other hand, contends that the matter which it was discharging was not refuse, within the meaning of the statute as I have defined it to you, and it contends this especially with regard to the concrete pipes because they served certain residential areas.

You will recall the testimony of the witnesses produced by both sides. Both sides produced experts. It is my recollection, but it is for you to determine, that some expert testified that this was industrial waste and couldn't be anything else. Some other witnesses testified that it could be something besides industrial waste. You must remember that.

In that regard the prosecution has the burden of proof, so if the net result of that deliberation is that it could have been both—it could have been from either, not both. If it was both, of course, you are not allowed to deposit anything, but if you reach the conclusion that it could have been from either one, either from the houses alone or from the plant alone, or both, then, of course, the Government would not have met its burden of proof. I am referring, of course, specifically to the content of this concrete pipe because, as you heard, water came in from the river and there was certain waste from certain houses, and you will recall what the Government witness said about it and you will recall what the defense experts said about it. The Government's contention that the Defendant is guilty of the offense charged and the Defendant's contention that it is not guilty depends and hinges upon the definition on an application of the term "refuse matter of any kind or description and other than flowing from streets and sewers and passing therefrom in a liquid state as sewage." You will recall that I have defined for you what I consider the key terms, "refuse" and "sewage." I do not consider sewers a key term because I consider the word "sewer" to depend on what is being carried. I defined these terms for you and you will be required to apply them in this case.

You will recall the testimony of the expert, Mr. Watts, the Government expert who testified, as I recall it—but again, take your recollection and not mine—he testified that in his opinion all four discharge samples were industrial waste. Mr. Lisanti, testifying for the Defendant, characterized both the discharges from the iron pipe, both the discharges from the iron pipe, [sic] as industrial discharges, and that from the concrete pipe sampled on August 19, 1970, as predominantly industrial discharge, but as to the discharge sample from the concrete pipe on August 7, which is Count One, his opinion is that it could as easily have been household waste as industrial discharge. You will remember what I charged is the burden of proof in that regard.

In connection with Mr. Lisanti's use of the term "industrial discharge," you will recall that in his opinion the samples could only be termed "industrial discharge" until he knew into what it was being put. In other words, he said that whether industrial discharge which is what came from the pipes was industrial waste depended into what the industrial discharge went and its effect thereon. Now, I have charged you that its effect on whatever it went into is not relevant to the case. We are concerned with what came out of that pipe and was deposited into a conduit which took it into the river, not on what its effect was after it got into the river, but this is principally a matter of semantics. Mr. Lisanti is using the term "industrial discharge" in a similar way to the way we are using the term "industrial waste," as I have defined it to you. I instruct you that the statute involved here is a broad one and does not contemplate the amount or the effect of the refuse matter discharged, although there isn't any evidence to that effect. I presume if somebody throws prohibited matter into a navigable stream, that's against the law even though the result of throwing it in there might be good. It provides that in order to discharge refuse matter of any kind or description whatsoever a permit is necessary before the deposit.

There has been some testimony in this case, as you know, regarding permits. The statute here provides that the discharge of refuse matter without a permit would be unlawful and it only becomes lawful if a permit to do so has been obtained prior to the discharge from the Army Corps of Engineers. If there were any evidence in this case that the Defendant had a permit that would conclude the matter. If they were discharging

refuse matter, as I have defined it to you, without such a permit, they would have violated the law, whether or not such a permit was available, and we don't know whether or not such a permit was available. We do know that there were none granted and that there were no forms for it and there were none applied for. There is no evidence in this case that the Defendant had a permit. As a matter of fact, the testimony indicates clearly that a permit had not been issued at all and the vice-president of the corporation testified that they had no such permit. I therefore instruct you that the defense of having a permit to discharge is not available to the Defendant in this case and you need not consider it. I further instruct you that the testimony to the effect that the Corps of Engineers may not have had application forms for a permit and may not have issued permits because no one applied for one prior to August, 1970, is irrelevant and not for your consideration.

The law presumes every Defendant to be innocent of crime. Thus a Defendant, although accused, begins a trial with a clean slate with no evidence against him. The law permits nothing but legal evidence presented before a jury to be considered in support of the charge against the accused. The presumption of innocence alone is sufficient to acquit any defendant unless the jury is satisfied beyond a reasonable doubt of the defendant's guilt as to each count individually and separately, after a careful and impartial consideration of all the evidence in the case. It is not required that guilt be proved beyond all possible doubt. You can't prove anything beyond all possible doubt. There are some people that doubt that two and two is four. The test is one of reasonable doubt. A reasonable doubt is a doubt based on reason and common sense, a kind of doubt that would make a reasonable person hesitate to act. Proof beyond a reasonable doubt must therefore be proof of such a convincing character that you would be willing to rely and act upon it unhesitatingly in the most important of your own affairs. A person—we are concerned in this case with a corporation, not a person, of course—can never be convicted on mere suspicion or conjecture. The burden is always on the prosecution to prove guilt beyond a reasonable doubt. This burden never shifts to the defendant. The law does not impose upon the defendant in a criminal case the burden of calling witnesses or producing evidence or proving anything. A reasonable doubt exists whenever, after careful and impartial consideration of all

the evidence in the case, the jurors are not convinced to a moral certainty that a defendant is guilty of the charge. If the jury views the evidence in the case as permitting either of two conclusions, one of innocence, the other of guilt, then, of course, you must give the benefit to the defendant because of the presumption of innocence.

This case started on an information, which is a document prepared and signed by the United States Attorney. This is but a method of accusing a defendant of a crime. It is not evidence of any kind against the accused. There are various types of evidence from which a jury can properly find a defendant guilty. One is direct evidence and the other is circumstantial evidence. Direct evidence is evidence which directly demonstrates the fact. A witness's testimony that he knows of the existence of a fact from his own knowledge is direct evidence of that fact. Circumstantial evidence is evidence from which you may conclude a fact. Let me give you an example. In these days of Perry Mason and TV we have often heard, "This is only circumstantial evidence." Circumstantial evidence can sometimes be stronger than direct evidence. For example, if a man with very defective eye sight looks out into his back yard and sees an animal running around there and says, "There is a rabbit," that is direct evidence that a rabbit is in the yard. On the other hand, if an expert on tracks, on animal tracks, sees tracks and says, "Those are the tracks of a rabbit, therefore there has been a rabbit in the yard," that's circumstantial evidence, yet you could see that one could be stronger than the other. Circumstantial evidence is evidence from a certain fact from which you may infer certain other connected facts which usually and reasonably follow according to the common experience of mankind. Either direct evidence or circumstantial evidence, or a combination of both, may be sufficient to sustain a conviction, but only if from all such evidence together you are satisfied of such guilt beyond a reasonable doubt, as I have defined that to you. If you aren't, you must acquit.

The statements and arguments of counsel are not evidence in the case unless there was a stipulation or an admission. For example, there was a stipulation that the Monongahela River is navigable. That is now evidence. There have been two stipulations in this case, two stipulations of fact. You will remember one was that the Monongahela River is navigable, is a navigable water of the United States. The other one is that the concrete

and iron pipes and the manufacturing establishments are owned by the Defendant. The evidence in this case additionally consists of the sworn testimony of the witnesses, regardless of who may have called them, and all of the evidence received, all of the exhibits received in evidence, regardless of who may have produced them.

There was in this case various evidence to which an objection was sustained. Of course, you must therefore disregard totally any such evidence. There were also questions asked and there was no answer given. The question itself, as I have told you, is not evidence in any way and you shouldn't consider the question if an objection was sustained to it. Those matters which I instructed you must be disregarded must be disregarded by you totally. I mean by that, you must not make any use of them whatsoever. You are to consider only the evidence in the case. However, you are not in that way limited to the bald statement of witnesses. You are permitted to draw inferences from the testimony that was produced if you feel that they are reasonably justified in the light of your experience. You are the sole judges of the credibility of the witnesses and the weight their testimony deserves. You should carefully scrutinize all of the testimony given, the circumstances under which each witness has testified and every matter in evidence which tends to show whether a witness is worthy of belief. Consider each witness's intelligence, his motive, his state of mind and demeanor and manner while on the stand. Consider the witness's ability to observe the matters as to which he has testified and whether he impresses you as having accurate recollection of these matters. Consider also any relation each witness may bear to either side of the case, the manner in which each witness might be affected by the verdict and the extent to which, if at all, each witness is supported or contradicted by other evidence in the case.

As to the persons who might receive a reward, of course, you can consider that in weighing the credibility of their evidence because they might have some interest. I merely say to you that the bounty system itself is a method used to enforce the law and from that you should draw no inference. You may use it in weighing the credibility of the testimony. Inconsistencies or discrepancies in the testimony of a witness or between the testimony of different witnesses may or not cause you to disregard such testimony. You should try to harmonize it, if you can. If not, you will have to decide just which one you believe.

Remember that two or more persons witnessing an incident or transaction may see or hear it differently or recollect it differently. This is a common experience. So is failure of recollection a common experience. That doesn't mean necessarily that the person who recollects differently is not telling you the truth. You must decide, however, what you do believe, what is credible.

In weighing the effect of a discrepancy always consider whether it pertains to a matter of importance or an unimportant detail and whether the discrepancy occurs from innocent error or intentional falsehood. After making your judgment you will give the testimony of each witness, if any, such weight as you think it deserves.

During this case you have heard the testimony of experts in chemistry and chemical analysis. In evaluating the testimony of an expert you should take into consideration his experience, qualifications, education and training, his ability to observe or know what he speaks of, his interest or bias or prejudice in the case in any way. In short, you determine his credibility. Some such witnesses have testified such as Mr. Watts and Mr. Lisanti. Their qualifications as experts were stipulated to and you may accept it, and as to Mr. Watts, the accuracy of the tests performed was stipulated to and his analyses, and you may accept that. There is no dispute as to what the tested samples contain but only as to the derivation of the contents and the properties thereof and the conclusions to be drawn from these characteristics of the various samples.

You will recall also the testimony of the other expert, Mr. Helwick. In that case you must first determine whether he is an expert because there is no stipulation as to that, so you must determine that first.

The opinions of an expert are not binding upon you. Although you are not to arbitrarily disregard the testimony of expert witnesses, if you find that their opinions are not based on all the relevant facts or are contrary to the evidence, you are free to disregard it. Again, you should try to harmonize the testimony of the experts, if you can. If you cannot, you must decide which, in your opinion, is the credible testimony.

As you know, this has been a hard fought case. Counsel sometimes react with emotion and then it becomes the problem of the Judge to keep everything going on an even track. Both men are officers of the court, both are honorable lawyers. They would

not purposely do anything wrong, and you should certainly not consider anything which may have occurred in my effort to keep the thing along the right track as indicating anything that you should hold against either of their clients. You should also not consider any opinion which I may have as to this case because that is totally irrelevant. The innocence or guilt is solely for you. I want to say that I would be permitted to comment directly upon the evidence offered if I saw fit to do so. I could say what I believe and what I don't believe. I didn't do that and I am not going to do that, so please don't try to read into anything which I may have said or any inflection of my voice or any facial expression or anything like that as being an indication of my opinion. I am neutral in the case. The case is for you to determine and if I weren't neutral and if I had an opinion it wouldn't make a bit of difference anyway because that's entirely for you, the jury, to determine. You are to determine the facts of this case entirely and alone upon the law, as I have given it to you.

I am going to send out various exhibits in the case which you should consider. When you go out to deliberate I think your attitude at the beginning is most important. It isn't helpful for a juror right off to express a view as to innocence or guilt. Then his pride becomes involved or her pride and it becomes difficult to change it. You should discuss the testimony, the evidence among yourselves. You are not partisans. You are judges, you are judges of the facts. Your sole interest is to determine the truth. You make a worthwhile contribution to the administration of justice when you arrive at a true verdict in a case.

I suggest that when you retire you elect a foreman and a secretary and proceed in a businesslike manner to determine the innocence or guilt of this Defendant. When you have completed your deliberation your secretary will then fill in the verdict slip which the clerk has prepared. You will then all sign the verdict slip. It contains room for the twelve signatures.

I think you know that you cannot return a verdict on any count unless it is agreed by all of you unanimously as to either innocence or guilt as to that count.

May I have the verdict slip.

You will find the verdict slip says, "And now, to wit," and there is a blank. You can fill in the date on which you reached the verdict. This is the 29th of June. You may or may not reach

your verdict today. "We the jury empaneled in the above-entitled case, find the Defendant as to Count One," and then we put in parentheses 230–1, concrete pipe, August 7, 1970, end parentheses. That's so you will know which one Count One is. Then there is a blank. You will fill in the blank. As to Count Two we have parentheses 230–2, concrete pipe, August 19, 1970, end parentheses. Then there is a blank. As to Count Three, parentheses 231–1, iron pipe, August 7, 1970, end parentheses, and a blank. As to Count Four, parentheses 231–2, iron pipe, August 19, 1970, parentheses, and a blank. You must fill in each one of the blanks with the words either "Guilty" or "Not guilty."

You may send any questions to us that you want as to matters of law through the bailiff and I will attempt to answer them for you, if I can. I will not be able to recall testimony because that is for your recollection and not for me, so please don't ask me, "What did Mr. Jones say," or anything like that.

There are twelve lines here. Each of you has to sign the verdict. You put it in the envelope, seal it and give it to the bailiff. If you have some other kind of a question, you put it in an envelope, seal it and give it to your foreman. He will then give it to the bailiff and the bailiff will see that it gets to me.

[Side bar conference.]

Mr. GONDELMAN. I object to the characterizations that are shown on that verdict slip as being totally unfair because you are indicating to the jury that in Count One they are to consider 230–1, which has many many items on it which have nothing to do with this case.

The COURT. I will take all designations off and prepare a new verdict slip with just "Count One, Two, Three and Four."

Ladies and gentlemen, counsel has objected to the designation of the counts. I am going to prepare a new verdict slip and it is going to say, Count One, guilty or not guilty, No. 2, guilty or not guilty, No. 3, guilty or not guilty, and No. 4, guilty or not guilty, and you will have to recollect what each individual count meant. As I have told you, Counts One and Two refer to the concrete pipe. I will send out the indictment and you can read from the indictment what the various counts refer to.

Mr. GONDELMAN. You are sending out the information.

The COURT. The information, rather.

Mr. GONDLEMAN. And the amended information?

The COURT. Yes, I will send out the information and the amended information.

Mr. GONDELMAN. Very well. No objection.

The COURT. Of the twelve original jurors, is anybody not feeling well or feel they cannot take part in the deliberations for any reason?

All right. Then Mr. Telluci, the alternate, is excused with the thanks of the Court. I don't want you to think that what you did was in vain because if somebody would have been ill or unable to be present or deliberate we would have needed you and we wouldn't want to try this all over again, so thank you very much and you may return to Room 536.

Will the bailiffs come forward to be sworn, please.

[The jury retired to deliberate.]

The COURT. Mr. Thornburgh, do you have any objections to the charge?

Mr. THORNBURGH. No, Your Honor.

The COURT. I gather neither party had any additional charge you wanted me to make because you didn't make them while the jury was still in the room.

Mr. GONDELMAN. I have exceptions.

The COURT. Exceptions, yes, but no additional charge to the jury because that's why we came to side bar and nobody asked for any additional charges. You may make your exceptions.

Mr. GONDELMAN. I take specific exception to Your Honor's telling the jury at the opening that the arguments of counsel are not to be considered by them and at no point did you tell them that they are to consider arguments of counsel. You said arguments of counsel are not evidence. So far as this jury knows, they are to pay attention to neither argument of counsel.

The COURT. That would have been a proper matter, and if you had asked I would have charged them on that.

Ask the bailiff to bring back the jury. Tell the bailiff I want the jury to put back in the box.

You should have requested that before I let the jury out. Do you have any more matters that you want them charged on?

Mr. GONDELMAN. Yes, sir.

The COURT: Why didn't you do that?

Mr. GONDELMAN. I didn't have a chance to.

The COURT. You were at side bar.

Go ahead.

Mr. GONDELMAN. You also told the jury they were not to be swayed by public opinion or possible sentence. You did not tell

them they are not to be swayed by the effect of their finding the defendant not guilty.

I except to Your Honor's submitting Counts One, Two, Three and Four to the jury as they are written. The only evidence in this case is that iron, aluminum and various specific items that are mentioned in this information are not regarded as of any consequence by Mr. Watts, the Government's own witness. He specifically said that as to iron, aluminum and other matters that were in each of the exhibits.

I except to the fact that you failed to charge on the matters contained in Section 419 of the Refuse Act which requires the Secretary of the Army to post regulations.

The COURT. Was there any point for charge submitted to that extent?

Mr. GONDELMAN. I submitted no points for any charge because Your Honor had indicated that none of the matters which I am now raising have anything to do with this case, and I didn't feel it was necessary. You failed to charge on the duties of the Secretary of the Army as they presently exist and the fact that under present regulations it is the duty of the Secretary of the Army to circularize the fact that permits are necessary and to get applications out.

I except to the definition of "refuse." Your Honor said it was a simple definition, that it is all foreign substances and pollutants, including industrial waste, particularly solids. I especially except to that in light of the fact that you used the word "pollutants" and yet at no time in this trial has the Defendant been able to prove that the matters which the Government objects to are not pollutants under any standards of the State or Federal Government. In fact, they comply with the standards.

I except to Your Honor's definition of "sewage." Your Honor said sewage is what flows from streets and sewers in a liquid state, which included water, filth and feculent matter, and does not apply to industrial waste. The Act does not use the word "sewage," but says matters flowing from streets and sewers.

I except to Your Honor's charge where you said one of the elements of the offense is that it must be an act unlawfully done. Your Honor stated this means the act was done knowingly and intentionally and with reckless disregard of the law. Then Your Honor said, "But it is not the contention of the Defendant that the act was done unknowingly or unintentionally." In fact, this Defendant does contend that the act was unintentional and unknowing in view of the fact that what was done complies

with the State and Federal standards and therefore it is not unlawful.

I except to the fact that Your Honor has even submitted the question of whether or not the fluids flowing, in all of the matters before the jury, are in a liquid state, when every expert testified that it was in a liquid state.

The COURT. I don't think they did. I think that was an incorrect statement that you argued to the jury, but go ahead.

Mr. GONDELMAN. We can disagree on what the evidence is, but my recollection of Mr. Watts' testimony is that I asked him specifically whether or not each sample was in a liquid state, and he said yes.

I except to the submission to the jury of the statement of Your Honor that whether or not there were forms for permits or whether they were obtainable is not to be considered. You then stated—and there is absolutely no evidence in this record—that if the Secretary of the Army, in his discretion, decided not to give permits, that is not for their consideration. Of course, the Secretary of the Army didn't decide in his discretion. We haven't been able to go into the fact that they simply didn't have them.

The COURT. You have said that several times. I don't think that is an accurate statement.

Mr. GONDELMAN. I would have been glad to prove it. Your Honor wouldn't let me.

The COURT. All you proved is that there were no forms. If somebody wanted a permit they could have written to the Secretary of the Army and said, "I would like to dump effluent into the river." That would be an application.

Mr. GONDELMAN. The fact that Your Honor said to the jury that if the Secretary of the Army in his discretion—I don't know where that evidence could come from or where the comment could be made to the jury. Your Honor has to comment only on evidence, too.

The COURT. That isn't true either.

Mr. GONDELMAN. You stated whatever instructions a person gets from an employee of the United States doesn't make any difference. It does make a difference insofar as it reflected the attitude of the Corps of Engineers. The example of the Post Office and mailing a letter, if you were told you didn't need an eight-cent stamp, of course, it would go and the receiver would

eventually pay the postage. That has no application in this case.

The COURT. Try it, Mr. Gondelman. It won't work that way.

Mr. GONDELMAN. Well, it does.

I specifically again except to the repeat in Your Honor's charge when you again said that the Act says that "sewage" is excepted instead of "matters flowing from streets and sewers."

Your Honor indicated that Mr. Lisanti testified for the Defendant—in fact, at the time referred to by Your Honor he testified for the Government and the Government was bound by his testimony. Mr. Lisanti's testimony was that industrial discharge depended on what it went into and its effect. I except to the fact that Your Honor then stated that Mr. Lisanti's characterizations were only a matter of semantics and that, in effect, his definition is the same as the Court's, which it isn't.

You stated it was irrelevant if the Corps did not have permits later again in your charge, to which, of course, we except throughout the charge to that, and especially to the statement that the Defendant would have violated the law even if permits were not available.

I think basically those are the items which I except to in Your Honor's charge as given to this jury.

The COURT. Will you bring back the jury.

[The jury was returned to the courtroom.]

The COURT. Counsel have raised some additional matters. You will recall that I charged you that the arguments of counsel are not evidence. Counsel states that I failed to charge you that they are entitled to your respective consideration. I did so charge you in the preliminary instructions that were given you and I tell you that again. They aren't evidence. Insofar as they were proper arguments, you are entitled to consider them. Insofar as they are arguments contrary to my instructions, you must not consider them.

As to the witness, Mr. Lisanti, it has been brought to my attention that I said he testified as an expert for the Defendant. You will recall that he testified as an expert for both parties. He testified partly as an expert for the Government and partly as an expert for the Defendant, and you will consider the testimony which he gave in both capacities in reaching your verdict.

Is there any additional matter that anybody wants me to charge the jury?

Mr. GONDELMAN. No, sir.

The COURT. All right. You may retire for your deliberation.

[The jury again retired to deliberate.]

[Jury returned to the courtroom.]

The COURT. Ladies and gentlemen of the jury, your foreman has sent this note. "Please define again refuse matter."

I am going to repeat the charge that I made previously as to refuse matter. This may not be word for word, but it will be as close as I can make it. Refuse matter of any kind or description whatever encompasses all foreign substances and pollutants. It includes industrial waste of any kind and particularly solids. That is particles in suspension as opposed to in solution. When I say "all foreign substances and pollutants," it wouldn't have to be both because there may be no evidence of one or the other, but foreign substances and pollutants, or either one of them.

As to excepted refuse matter, when I say "excepted," I mean the exception from the statute, what the statute makes an exception for, and that is that which flows from streets and sewers and passes therefrom in a liquid state. This is the excepted refuse matter. In other words, that could be refuse matter, but it is excepted. This simply means sewage. The exception is sewage. Sewage is matter carried away in sewers. That is water, filth and feculent matter. Generally sewage derives from human and domestic wastes. That is an exception. Sewage can, in fluid state, be put into the waters. The exception does not include industrial wastes or discharge, especially those containing suspended solids.

I have previously also defined "sewer" for you. A sewer, as I said to you, is defined by the particular matter for which it acts as a conduit and not the construction of the conduit itself. A concrete pipe or an iron pipe could be a sewer. It could also carry electric wires or any other number of things. It is a sewer if it carries sewage, and sewage is as I have just defined it to you, and that is an exception from the prohibition. Sewage is an exception which flows from the streets or sewers. Refuse matter, as I have defined it, which is not sewage, is not an exception.

The COURT. Is there any objection or anything you want to talk to me about as to the way I just defined "refuse matter?"

Mr. GONDELMAN. I do, Your Honor, but I don't know that this is the time and place for it.

The COURT. Is there any additional matter you wish me to charge on that definition?

All right. Then you may renew your deliberation.

Do you want to write something else?

The FOREMAN. Yes.

The COURT. Give the foreman this note. Write it, sir, and then I will ask counsel to confer on it.

[Foreman complying.]

The COURT. I am not sure I understand that. "You use the term 'refuge' in your definition. The word I am referring to is 'refuse, r-e-f-u-s-e'."

That's the word that I am defining and that is the word used in the statute, "refuse, r-e-f-u-s-e," and in another sense you could call it "refuse", but that is what we are not talking about here. We are talking about "refuse" as I have defined it to you and as I have spelled it for you.

Will you retire the jury for further deliberations.

[The jury again retired to deliberate.]

The COURT. I will show you that note and we will preserve it. Apparently my pronunciation of the word——

Mr. GONDELMAN. I am sure what he is referring to is that when you said "refuse" it sounded like "refuge." It came across as "r-e-f-u-g-e" instead of "s-e."

I, of course, want to once more except to the definition of "refuse matter of any kind or description," as Your Honor has defined it, especially again in light of the fact that you call it "any foreign substance and pollutant," for the reason that in light of the trial of this case the defense has not been able to show what a pollutant is or is not.

I further except to the definition of the word "sewer" as being synonymous with "sewage." I have Webster's New Collegiate Dictionary which says, as I quoted to the jury, cited to the jury, "A sewer is an artificial, usually subterranean conduit to carry off water and certain waste matter." It defines "sewage" as "The content of a sewer or drain, refuse liquids or matter carried off by sewers." Your Honor has totally taken away from the jury the fact that refuse which flows in a sewer is excepted from the Act and that the burden, of course, is on the prosecution to prove otherwise. I know of no definition as given by Your Honor to this jury and I think it is extremely prejudicial.

The COURT. I don't think I did that. I tried to point out that a sewer is a conduit which carries sewage.

Mr. GONDELMAN. Then you defined sewage as only referring to household waste, feculent matter, and sewage as it is defined by every standard that I have been able to uncover encompasses, "including industrial waste."

The COURT. I don't think so. What you are arguing is that if industrial waste goes through a sewer, then it is excepted, and I don't think that is a correct statement of the law.

Mr. GONDELMAN. In a liquid state.

The COURT. I don't think that is a correct statement. If that is a correct statement, then there are various ways that you can——

Mr. GONDELMAN. I respect your contentions, but I don't think a correct statement is that a sewer carries only human waste, which is what Your Honor has said to this jury, which takes away the industrial waste problem.

The COURT. Anything could go down a sewer. If you throw a gumball down a sewer, that is not sewage.

Mr. GONDELMAN. I am not saying that is sewage. Under the statute anything that flows from sewers and streets and passes therefrom in a liquid state, without saying "except that it must be limited to human excrement and ——"

The COURT. You may be right. I merely took that from a Supreme Court decision. If they are wrong, I am wrong.

Mr. GONDELMAN. The Supreme Court sometimes defines matters in very broad and general terms without being applicable to a particular fact situation, which is what I am trying to do here.

The COURT. Sometimes they change their minds, but I have to follow what they have said already until such time as they do change their minds.

Mr. GONDELMAN. I don't think I have anything further. I think I have excepted to the definitions, as I have previously.

[The jury returned to the courtroom.]

The CLERK. Members of the jury empaneled in the case of United States of America, Plaintiff, versus Pennsylvania Industrial Chemical Corporation, Defendant, in Criminal Action No. 71-75, you say you find the Defendant, as to Count One, guilty; Count Two, guilty, Count three, guilty; as to Count Four, guilty. So say you all.

Mr. GONDELMAN. May I have the jury polled, Your Honor.

[The jury was polled.]

The COURT. Ladies and gentlemen of the jury, I want to extend to you the thanks of the Court for your devotion to duty in this case. Although it isn't as dramatic as some of the criminal cases we read about, I think this is a highly significant case on a matter which is of grave importance to our country in the future. As I said to you during the course of the deliberations, I had to make various rulings. Some of these rulings chart new ground, as far as I know. If my rulings were not correct, there will be adequate ways for us to determine what the law is as determined by the right body. However, you have rendered your services in a commendable fashion. The Court thanks you. You are now excused from any further jury duty.

[Whereupon the hearing was concluded.]

CERTIFICATE

I hereby certify that the evidence and proceedings are contained fully and accurately in the stenographic notes taken by me on the trial of the above cause (pages 140 through 403), and that this is a correct transcript of the same.

VERONICA MECHESNEY,
Court Reporter.

PROCEEDINGS OF SENTENCE OF JULY 30, 1971

In The United States District Court for the Western District of Pennsylvania

Criminal Action No. 71–75

UNITED STATES OF AMERICA

vs.

PENNSYLVANIA INDUSTRIAL CHEMICAL CORPORATION, A CORPORATION, DEFENDANT

Proceedings

Sentence in the above entitled action, on July 30, 1971, at 10:00 A.M., Pittsburgh, Pennsylvania, before Honorable Hubert I. Teitelbaum.

APPEARANCES

On behalf of the Government: Richard Thornburgh, United States Attorney.

On behalf of the Defendant: Harold Gondelman, Esquire.

The COURT. Good morning.

Mr. THORNBURGH. Good morning, Your Honor.

THE COURT. The first thing we will take is the United States of America versus the Pennsylvania Industrial Chemical Corporation.

Mr. Thornburgh.

Mr. THORNBURGH. This case at Criminal 71–75 comes on for sentencing this morning before Your Honor. I note the presence of counsel for the corporation, defendant, Mr. Gondelman.

Mr. GONDELMAN. Good morning, Judge.

Mr. THORNBURGH. As Your Honor recalls, on June 29, '71, the defendant, Pennsylvania Industrial Chemical Corporation, was found guilty by a Jury before Your Honor on four counts of violating Title 33, Section 407, of the Rivers and Harbors Act of 1899.

While, Your Honor, we recognize that the sentencing is the sole prerogative of the Court, and we will make, as is the ordinary custom of the United States Attorney's Office, no recommendation with respect to the sentence, I would be remiss if I did not bring to the Court's attention, on the record, the provisions of Section 411 of Title 33, the gist of which is that the Court in its discretion has the power to award one-half of any fine that is imposed for violations of Section 407, in the words of the statute, to the person or persons giving information which shall lead to conviction.

For the benefit of the Court, and to again make the record absolutely clear, the United States Attorney's Office must point out that this proceeding against the Pennsylvania Industrial Chemical Corporation could not have proceeded without the information furnished by individuals that I will indicate with respect to each of the counts upon which they were convicted; and Your Honor, of course, having heard the case, this will merely refresh your recollection by stating on the record the circumstances.

As to Count One, the data was gathered by Mr. David G. Nixon and John Zavodni, in their travels in the Monongahela River in a canoe, as Your Honor will recall from the testimony; and the information, the samples that they gathered were analyzed, and the report rendered to them and to the United States Attorney's Office by Michael Watts, acting on behalf of the Soil and Water Conservation District of Allegheny County.

The same holds true as to Count Three. That is, Mr. Nixon, Dr. Zavodni and Michael Watts each had a part, as the record indicates, in furnishing the information which lay the basis for the prosecution and for the guilty verdict.

As to Counts Two and Four, the information was provided by David G. Nixon, Thomas Young. As Your Honor will recall, Dr. Zavodni was on vacation on August 19, the date of those two counts; and similarly, Michael Watts, of the Soil and Water Conservation District, performed the analysis and rendered the report to Messrs. Nixon, Zavodni and Young, and subsequently, the United States Attorney's Office, which formed the basis for these proceedings.

I mentioned these, Your Honor, not by way of anything other than what we feel bound to bring to the Court's attention, under the provisions of Section 411, the Court having discretion to award one-half of any fine in the proceeding to the person or

persons giving information which shall lead to conviction, the United States Attorney's Office feeling that Messrs. Nixon, Zavodni and Young, and Watts, in the manner indicated, are indeed person or persons who gave information which led to the conviction in this case.

The COURT. The Pennsylvania Industrial Chemical Corporation appears by its counsel.

Mr. GONDELMAN. That is correct, Your Honor.

The COURT. That is permitted, of course, by the rules. There is nobody else appearing for them.

Mr. GONDELMAN. That is correct, sir.

The COURT. Is there anything you would like to say?

Mr. GONDELMAN. I would like, at this time, like to get into the record all of the matters that Your Honor would not permit the Jury to hear, because I think it is in mitigation of any penalty which Your Honor might impose.

The COURT. We will hear it in mitigation of any penalty.

Mr. GONDELMAN. In connection with the four counts of this indictment, I think it is remiss of the United States Attorney and the informants not to have investigated and found that, as to each element and chemical charged in each count of the information, the amounts of discharge into the Monongahela River is less than the standard set up by the Commonwealth of Pennsylvania and for which the Pennsylvania Industrial Corporation had a state permit. Those standards are accepted and adopted by the United States Government, so that the conviction of discharging those chemicals into the Monongahela River is a conviction for discharging what the Government of the United States says, by its own agencies, is not a pollutant and is well within the standards of Water Quality Control.

Now, in Your Honor's opinion, you talked about a permit, and I guess the answer is, we are supposed to be found guilty actually of discharging without a permit, because the permit, if there had been a procedure to secure one, would have been issued.

I can only cite to Your Honor, EPA Administrator Ruckelshouse, who I think is supposed to be somewhat of an authority and is in charge of this whole matter in the United States of America. Mr. Ruckeshouse, in answer to this question, made—answered this question this way: Isn't there overlapping federal jurisdiction on enforcement already, under the Refuse Act

and the Federal Water Pollution Control Act? He said the laws almost contradict one another.

Under the 1899 Refuse Act, it is against the law to dump refuse into the navigable water or their tributaries without a permit.

The COURT. As I understand, what you are saying, Mr. Gondelman, not only is Mr. Thornburgh remiss, but the Congress, for passing contradictory legislation.

Mr. GONDELMAN. That may be. They both may be remiss.

The COURT. I am afraid you will have to direct that to the Congress, and the other to Mr. Thornburgh. I will hear anything you want in mitigation.

Mr. GONDELMAN. I think this is in mitigation, because certainly, if you have one defendant before Your Honor whose effluent exceeds and violates the Water Quality Control standards.

The COURT. That is in mitigation, now.

Mr. GONDELMAN. Right, but if you are talking as you did in your opinion, that we did not have a permit, let me just call your attention to what Mr. Ruckelshaus says about it. He said the Water, Federal Water Pollution Control Act specifies the setting of standards by the states, and approval by the Federal Government, which was done in this case.

Under the 1965 Act, the people are to comply with the Water Quality Standards. It says nothing about discharge into a stream being illegal.

It really isn't entirely fair to say the reason a person is being sued under the Refuse Act is because they don't have a permit. They couldn't get one if they wanted to. Until the permit program of the Corps of Engineers was announced late last year, we didn't have any permit program for the discharge of waste into a stream.

EPA has restricted its use of the 1899 Act to cases where somebody was not in compliance with Water Quality Standards, and was not doing anything to achieve compliance with those standards. There are enough of those cases to keep us busy for some time.

The COURT. You understand, now, your client was not found guilty of not having a permit, and I did not say that in my opinion. What your client was found guilty of was discharging refuse into the water. That is what he did, and that is what I

said in my opinion; and he did not have the permit that might have permitted him to do it. The offense was not having a permit. The offense was dumping refuse.

Mr. GONDELMAN. And without a permit. Because, if he had a permit, he wouldn't be guilty of a crime.

The COURT. No, that would have given him permission to do it. But he did it. He was forbidden to do it, and you say that there was no procedure to get a permit. I think there was. I think he could have written to the appropriate Secretary and told him what he wanted to do, and said, "There is a provision of law for a permit," and then the Secretary could have said, "Yes, I will give you one." He could have written him a letter and given him one, or he could have said, "No, I won't."

Mr. GONDELMAN. All I'm doing is calling Your Honor's attention to it, although I understand that's the Court's opinion and viewpoint. I'm saying Mr. Ruckelshaus deals only with Environmental Protection Agency, has in an interview informed us, and I'm trying by that to inform the Court, that the fact is that, despite the thought of Your Honor and the viewpoint of Your Honor, that if somebody had written to the Corps of Engineers and asked for a permit, they might have gotten a permit.

The COURT. I do not know they would have or not. The fact is, they dumped without a permit.

Mr. GONDELMAN. The fact is, under Mr. Ruckleshouse's statement, there was absolutely no procedure, nor did the Corps of Engineers issue; and under the exhibits I have shown to Your Honor, that are now sealed, which I would want to have opened so I can get copies for the Court of Appeals when this case goes up, that the permit——

The COURT. It is already up.

Mr. GONDELMAN. No, sir. We take it from today; couldn't appeal before sentence.

The COURT. That is right. You are quite right.

Mr. GONDELMAN. The fact is that the exhibits, which are sealed in the envelope, show that the Corps of Engineers has fourteen to eighteen-page application for permit, dated April and May 1971.

The COURT. You understand, the way I see this, a person who drives an automobile must have a license. If he does not have a license, the offense is not having a license; the offense is driving the automobile. He may drive if he is granted that

privilege by a license. If he is not granted that privilege he cannot drive; and it would not make any difference if the State of Pennsylvania all of a sudden decided not to issue any licenses, as I see it.

Mr. GONDELMAN. Of course, then, you would get into very complicated constitutional problems.

The COURT. We may, but I am using it merely as an analogy.

Mr. GONDELMAN. I use that analogy in connection with this case, because——

The COURT. It may be unconstitutional to prohibit you from dumping your industrial waste into the river. That is not for me to say. I do not think it is unconstitutional.

Mr. GONDELMAN. It is for Your Honor to say.

The COURT. I do not think it is not unconstitutional. You have not raised it, so it is not for me to say.

Mr. GONDELMAN. The fact I haven't is, I haven't raised it, because there is a way of harmonizing the Acts Your Honor hasn't accepted, and that is to use the Act of 1970 to impair 1899.

The COURT. I have nothing before me except a sentence.

Mr. GONDELMAN. So, I'm trying to get simply to the fact that, in mitigation, you have a Corps of Engineers, and an Act of 1899 which, until December 23, 1970, did not have a permit program of any kind.

The COURT. You are arguing the case.

Mr. GONDELMAN. When you say we discharge without a permit, I think, in mitigation of that, I must ask Your Honor to consider the application of that Act and its enforcement, and the manner in which the Government, who is, after all, the party plaintiff in this case—it is the United States of America versus—the United States of America, since 1899, has not had a permit program.

The Federal Register, which I gave Your Honor, indicates that on December 23, 1970, President Nixon directed the Corps of Engineers to establish that program, so that it is a twofold argument in mitigation. Item number one, there was no permit program in America. Item number two, insofar as what we are charged with polluting the rivers with, under the Commonwealth of Pennsylvania, and the United States Government's definition of pollution in the waters, which are supposed to be the reason for this case being brought, as part of the ecology program of the country, and the United States At-

torney's Office, local. The fact is that what was done did not affect the ecology, from those who are setting up the ecology standards.

Item number three, in June of 1970, before those who Mr. Thornburgh indicated should partake of any fine that Your Honor might impose, in June of 1970, Chester Engineers was hired, as Your Honor heard, and were in the process of developing a new water treatment plant, not because what the company was doing violated the standards then in force, but because the new Pennsylvania standards which are to come into being in December, 1972, would require us to go further than we have gone to this date. Therefore, Chester Engineers was in the process, before the Government of the United States came around to see this defendant, before anybody rode up and down their property with a canoe, with getting an expert in water quality control to design, and they have designed, a water treatment facility, which will further clean the waters coming from the PICO plant.

The COURT. You say somebody rode up and down somebody else's property in a canoe.

Mr. GONDELMAN. I'm saying, in front of the property.

The COURT. You do not contend you own the Monongahela River.

Mr. GONDELMAN. I'm not talking about trespass. I am referring to the fact there was a canoe on the Monongahela River, and before that canoe was on the Monogahela River, Chester Engineers was there conducting samples and making a study that would do more for the ecology than this case is doing for the ecology, because it is an affirmative action by a company who is aware of its responsibilities in this environmental process, and who are designing and are in the process of getting state and federal permits for a treatment facility which will cost in excess of $300,000 to install and in excess of $50,000 a year to operate.

So, I think what I'm trying to say, Your Honor, is that this defendant is not one who has flagrantly violated the ecology laws, or the Act of 1899, or any other laws of this country; but has in fact attempted to work within those laws, as everybody understood those laws, up until the Act of 1899 was used as it has been in this case. But the—before the Government got into the act, and before Nixon or Zavodni got into the act, this company was in the process of doing the intelligent thing, and that

is hiring the experts in water quality standard control to develop that water treatment facility.

So, I think that the company has shown that it is not a flagrant violator. It is not simply dumping water, under the theory it owns the Monongahela River, which it does not.

The COURT. No, I thought you said that; I was not sure.

Mr. GONDELMAN. I didn't say that. But they do recognize their responsibility in this community. They have been there for fifteen years. They have attempted——

The COURT. How long have they been there? Fifteen years?

Mr. GONDELMAN. Yes.

The COURT. When did they hire Chester?

Mr. GONDELMAN. When did they first hire Chester?

The COURT. Yes.

Mr. GONDELMAN. Well, they didn't hire Chester.

The COURT. To do whatever Chester is doing there.

Mr. GONDELMAN. When they built the plant, I have to give you this background. The background of it is, when the plant was built, it wasn't Chester. There was another expert in water quality control who did build a water treatment facility, which has been operating at a cost of ten or fifteen thousand dollars a year, to bring the discharge of the plant into the Monongahela River within the then Pennsylvania Water Quality Standards. That has been going on since that plant was built.

Chester was engaged in June of 1970, when the Commonwealth of Pennsylvania had passed a higher standard, which requires a new water treatment facility.

The COURT. Now, I understand. Thank you.

Mr. GONDELMAN. They didn't just open a plant and dump their refuse into the Monongahela River, at any time.

The COURT. You know what the maximum fine here is.

Mr. GONDELMAN. Yes.

The COURT. Is there anything you have to indicate that the Pennsylvania Industrial Chemical Corporation is in bad condition?

Mr. GONDELMAN. I don't think that has a thing to do with it.

The COURT. It would. If they did not have the money, I would be inclined to take that into consideration.

Mr. GONDELMAN. I would want Your Honor to take into consideration, this defendant is not a flagrant pollutor; and from that standpoint, that they are deserving of the consideration

of the Court, because they had every permit except the Corps of Engineers permit.

The COURT. Thank you, sir. Mr. Thornburgh, did you—

You did not want to say anything more, did you?

Mr. GONDELMAN. No. I wouldn't think of burdening Your Honor.

Mr. THORNBURGH. Although neither Mr. Gondelman or myself are sworn witnesses, there are certain factual matters that Mr. Gondelman referred to which I would like to have corrected.

It is the Government's position, although we were never put to the test on it, that there was indeed a program in the Western District of Pennsylvania for the obtaining of permits. None were ever sought. But the regulations of the Corps of Engineers make it manifest that such permit applications were contemplated, and there was a written procedure having to do with it. I don't mean to retry that issue here, but I think it is only proper to put the Government's position on the record.

Secondly, with respect to Mr. Ruckelshaus, who is a personal friend of mine, and a man for whom I have a great deal of respect, I nonetheless suggest to the Court and to Mr. Gondelman that the areas and spheres of responsibility of Mr. Ruckelshaus, as the head of the Environmental Protection Agency, and Richard Thornburgh, the United States Attorney for the Western District of Pennsylvania, a much smaller job, are entirely different. Our job is to enforce the criminal laws of the United States, one of which is the so-called Refuse Act of 1899; and while we would take into account any views Mr. Ruckelshaus had with respect to what the Department of Justice and the United States Attorney should do, it is our job, in the final analysis, to enforce these laws.

Finally, Mr. Gondelman having submitted material in mitigation, I can't help but present to the Court, if the Court will receive it, some evidence or material in exacerbation, if you will; a report of Mr. Watts, of the Bureau of Tests, with respect to samples taken at the discharges in question, on June 22, 1971, a little bit more than a month ago, showing similar or more serious quantitative discharges out of the pipes in question, and I would ask the Court's leave to submit that to Your Honor.

The COURT. That is since the indictment?

Mr. GONDELMAN. Information.

Mr. THORNBURGH. This is just a month ago.

The COURT. Indicating they continue to do that.

Mr. THORNBURGH. It is at least consistent; and in one case, although I'm not a water quality expert, in one case it would appear to me to be more serious than the matters. I'm sorry I don't have a copy.

Mr. GONDELMAN. I don't need a copy. I can tell, Your Honor is the fact still is that everything that is in that exhibit, and it was in the exhibit before the Court, when taken as the experts take it in the flow of the Monongahela River, is well below the United States Government's Water Quality Control Standards.

The COURT. You are continuing to violate the law, if I am correct on what the law is.

Mr. GONDELMAN. No. Now, you see that isn't true. If I may suggest again to Your Honor the fact——

The COURT. I said if I am correct on what the law is, there. Do they have a permit now?

Mr. GONDELMAN. Let's study the law. See, if I could only get a chance to tell Your Honor that, I will. May I?

The COURT. Go ahead.

Mr. GONDELMAN. May I tell you?

The COURT. May I have one second?

Go ahead, Mr. Gondelman.

Mr. GONDELMAN. The fact is, as I suggested to Your Honor, we had until July 1, 1971 to ask for a permit, under the Act of 1899, as implemented in the Federal Register. The fact is, this company, because it had hired Chester Engineers, had its program so far advanced that it could have had its plans accepted by the Corps. They have already been certified by the State of Pennsylvania. They have been accepted by the Corps of Engineers. It would now appear that PICO will have number one permit in the Western District of Pennsylvania, now that there is a permit program.

So that the fact that they are still operating their business, and on June 22 had discharges into the river, it is still under the application. We certainly were, intended to and did file the permit application, as soon as the Government of the United States made them available. It isn't as simple as writing a letter. You wouldn't look at the application permits, but take a look at what the Government requires before you say that all you have to do is write the Corps of Engineers a letter and say, "Please give me a permit." There are fifteen pages of ap-

plications, with analysis and everything that has to go into getting a permit.

That permit has been applied for, and I understand it will be issued, because it is in compliance and has been certified by the state, which is all the Corps of Engineers is looking for.

The COURT. Anything further?

Mr. GONDELMAN. No, sir.

The COURT. It is the sentence of the Court, at Criminal Number 71-075, that on Counts One, Two, Three and Four, the defendant, Pennsylvania Industrial Chemical Corporation, is fined $2,500.00 each, for a total of $10,000.00.

I am going to award half of the $10,000.00 to David George Nixon, John J. Zavodni and Michael Watts, in even shares. I have not included Mr. Young, because I feel that he was really only substituting for one of the men on one of the occasions, if these gentlemen are inclined to take that into consideration themselves.

Mr. GONDELMAN. I assume there is no problem, since I have no notice of appeal ready, anticipating Your Honor's sentence and decision.

Mr. THORNBURGH. I don't know whether Your Honor has to, for the record, notify them of their rights to appeal——

The COURT. He will appeal, so he will not be heard.

Mr. GONDELMAN. I just anticipated, by having my notice. I didn't think it was nominal.

The COURT. You would have appealed if it were nominal, anyway. The fine does not make any difference. It is the principle.

Mr. GONDELMAN. It is the principle and some other things, now.

(Whereupon, the following discussion took place when no counsel were present.)

Mr. NIXON. Excuse me, Your Honor. May I be heard?

My name is David Nixon. I was one of the informants in the case of Pennsylvania Industrial.

Your Honor, I'm no attorney, but I would respectfully ask you to reconsider a portion of your decision as to who should be awarded the fine. If I may respectfully call Your Honor's attention to the United States versus Simmons.

The COURT. What is it you want me to do?

Mr. NIXON. I maintain, sir, that the information that was provided to the United States Attorney on October 22, 1970, was identified, that information identified the informants as in an affidavit, of which I have a copy——

The COURT. What is it you want?

Mr. NIXON. As David G. Nixon and John Zavodni.

The COURT. What do you want me to do?

Mr. NIXON. I request Your Honor to grant the portion of the fine to which the informants are entitled to those parties and——

The COURT. I thought I did.

Mr. NIXON. Your Honor included a third party, sir.

The COURT. Yes, Mr. Watts.

Mr. NIXON. Yes, sir. And, in so doing, I respectfully call your attention to the United States versus Simmons, if I may.

The COURT. I will not do what you have requested. I am going to give Mr. Watts a share, too. He did a substantial amount of work in this matter.

I do not want to hear anything more about it. Mr. Gondelman is no longer here. Another case has been called.

Mr. NIXON. Thank you, sir.

CERTIFICATE

I, Jordan Lilienthal, Official Reporter, do hereby certify that the foregoing transcript is true and correct.

JORDAN LILIENTHAL,
Official Reporter.

PITTSBURGH, PENNSYLVANIA.
AUGUST 31, 1971.

[Government trial Exhibit No. 7 (Admitted at —)]

Code 230–1

pH	8.8
Alkalinity, total as $CaCO_3$ ppm	1070.0
Alkalinity, (bicarb HCO_3) as $CaCO_3$	—
Alkalinity, (carb CO_3) as $CaCO_3$	—
Free Mineral Acid Acidity	—
Total Acidity, due to acid and Fe-Al salts	—
Hardness, total as $CaCO_3$ (EDTA)	52.0
Iron, total Fe	0.4
Aluminum, Al	40.4
Manganese, Mn	0.1
Chloride, Cl	20.0
Phosphate, total PO_4	0.0
Sulphate, SO_4	262.0
Cyanide, Cn	0.0
Total Solids	12898.0
Volatile Solids	753.0
Fixed Solids	12145.0
Suspended Solids	140.0
Condition	High pH High Solids

[Government trial Exhibit No. 8 (Admitted at —)]

Code 511–1

pH	8.4
Alkanlinity, total as $CaCO_3$ p.p.m	8.0
Alkalinity, (bicarb HCO_3) as $CaCO_3$	—
Alkalinity, (carb CO_3) as $CaCO_3$	—
Free Mineral Acid Acidity	—
Total Acidity, due to acid and Fe-AL salts	8.0
Hardness, total as $CaCO_3$ (EDTA)	164.0
Iron, total Fe	0.1
Aluminum, AL	1.1
Manganese, Mn	0.3
Chloride, CL	8.0
Phosphate, Total PO_4	0.8
Sulphate, SO_4	267.0
Cyanide, CN	0.0
Total Solids	348.0
Volatile Solids	112.0
Fixed Solids	236.0
Suspended Solids	—
Condition of Sample	Potential Acidity

[Government trial Exhibit No. 9 (Admitted at —)]

Code 231-1

pH	7.6
Alkalinity, total as $CaCO_3$ ppm	8200.0
Alkalinity, (bicarb HCO_3) as $CaCO_3$	—
Alkalinity, (carb CO_3) as $CaCO_3$	—
Free Mineral Acid Acidity	—
Total Acidity, due to acid & Fe-Al salts	—
Hardness, total as $CaCO_3$ (EDTA)	0.0
Iron, total Fe	1.4
Aluminum, Al	41.8
Manganese, Mn	0.0
Chloride, Cl	36.0
Phosphate, Total PO_4	0.7
Sulphate, SO_4	3206.0
Cyanide, Cn	0.0
Total Solids	28,782.0
Volatile Solids	3,374.0
Fixed Solids	25,408.0
Suspended Solids	110.0
Condition	High Solids

[Government trial Exhibit No. 10 (Admitted at —)]

Code 230-2

pH	4.4
Alkalinity, total as $CaCO_3$ ppm	0.0
Alkalinity, bicarb HCO_3) as $CaCO_3$	—
Alkalinity, (carb CO_3) as $CaCO_3$	—
Free Mineral Acid Acidity	—
Total Acidity, due to acid & Fe-Al salts	360.0(D)
Hardness, total as $CaCO_3$ (EDTA)	168.0
Iron, total Fe	1.2
Aluminum, Al	98.4
Manganese, Mn	0.8
Chloride, Cl	132.0
Phosphate, total PO_4	0.2
Sulphate, SO_4	270.0
Cyanide, Cn	0.0
Total Solids	1068.0
Volatile Solids	417.0
Fixed Solids	615.0
Suspended Solids	15.0
Condition	Organics High Mn-Cl High Solids

(D) Acidity in terms of acetic acid

[Government Exhibit No. 11 (Admitted at —)]

Code 511-8

pH	5.4
Alkalinity, total as $CaCO_3$ p.p.m	4.0
Alkalinity (bicarb, HCO_3) as $CaCO_3$	—
Alkalinity (carb, CO_3) as $CaCO_3$	—
Free Mineral Acid Acidity	—
Total Acidity, due to or/and acid & Fe-AL salts	12.0
Hardness, total as $CaCO_3$ (EDTA)	180.0
Iron, total Fe	0.0
Aluminum, AL	4.6
Manganese, Mn	1.0
Chloride, CL	8.0
Phosphate, total PO4	0.1
Sulphate, SO4	258.4
Cyanide, CN	0.0
Total Solids (suspended & dissolved)	404.0
Volatile Solids	87.0
Fixed Solids	317.0
Suspended Solids	—
Condition of sample:	Potential Acidity High Mn. Low pH

[Government trial Exhibit No. 12 (Admitted at —)]

Code 231-8

pH	10.0
Alkalinity, total as $CaCO_3$ ppm	16,000.0
Alkalinity (bicarb HCO_3), as $CaCO_3$	—
Alkalinity, (carb CO_3) as $CaCO_3$	—
Free Mineral Acid Acidity	—
Total Acidity, due to acid & Fe-Al salts	—
Hardness, total as $CaCO_3$ (EDTA)	0.0
Iron, total Fe	2.2
Aluminum, Al	83.6
Manganese, Mn	0.0
Chloride, Cl	540.0
Phosphate, total PO4	10.5
Sulphate, SO4	9,768.0
Cyanide, Cn	0.0
Total Solids	46,832.0
Volatile Solids	7,337.0
Fixed Solids	39,495.0
Suspended Solids	320.0
Condition	Turbid Rusty Color High pH. Cl Solids Organics

Supreme Court of the United States

No. 72-624

UNITED STATES, PETITIONER

v.

PENNSYLVANIA INDUSTRIAL CHEMICAL CORPORATION

Order Allowing Certiorari. Filed December 18, 1972.

The petition herein for a writ of certiorari to the United States Court of Appeals for the Third Circuit is granted.

U.S. GOVERNMENT PRINTING OFFICE: 1973